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Office Management

Its Principles and Practice

Covering Organization, Arrangement, and
Operation with Special Consideration
of the Employment, Training, and
Payment of Office Workers

By

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AUTHORS TO DO THEIR BEST WORK

PREFACE

Modern business appeals to men because it offers worthwhile problems for them to solve. The impelling force in business, as in every other profession, is constructive imagination. The real lawyer is the man "who works up the case," not the person who draws the brief according to the facts presented to him. Similarly, the real business man is he who attacks the problem before him, whatever his official position. The clerk may be attacking his problems with the spirit, energy, and methods characteristic of the true professional man, while the manager may be in a narrow rut, following rules and prejudices.

The man with a constructive imagination finds a rich field in the office. But he must first realize that the office is a positive, not a neutral, factor in the business scheme.

"My greatest office problem," said an office manager, "is inefficiency." Such a statement reflects as much information as the negro minister's exclamation, "The trouble with this world, brethren, is sin!" Inefficiency is a general term covering a multitude of activities that have missed the mark aimed at. Constructive management attacks the problem of office control in a specific way by first segregating each activity and then studying its relationship to all others.

The president and directors of a business show their capacity for management through the success achieved in capitalizing opportunities for investment; the general manager, the sales manager, and other executives responsible for the operation of the plant and the distribution of the product, stand or fall on their ability to capitalize the advantages of location, new machinery, labor supply, and the like. The office manager on the other hand, while not directly respon-

sible for the financing, production, or selling of the product, must capitalize the subtlest of all business resources—he must capitalize the good-will of the company, if he would claim success. Upon the office manager falls the task of rendering that indescribable service which flows from an organization where all the activities function smoothly—with speed, accuracy, and dependableness. He deals with the invisible capital of the organization.

The office cannot be adequately conceived, either as merely a *place* or as merely a *system*. Many of the functions of office work are carried on in connection with the manufacturing processes, far removed from the “office” itself where stenographers, typists, and bookkeepers sit and work. A workman fills out his own time slip; the shipping clerk signs a receipt; the credit man files away his credit memoranda; a salesman fills out his daily report for the “home office.” Neither is system the chief element in the conception of an office. System, in its narrow sense, implies forms, rules, regulations; in its wider sense, it implies organization, the material framework for classifying, recording, and dispatching the manifold activities of business. A system, however, like the nerves of a body may stand complete in itself, yet want the life to act, and the brain control to co-ordinate its activities. An office is more than the room which houses the operatives, or the framework or system which ties the parts together. When we speak of an office we should think of a living, active organization.

We say that the business activity is justified economically when it can prove that it adds to the sum total of economic goods. Thus the lighting of a factory aids in promoting manufacturing and in the reduction of losses through accidents, mistakes, and waste. Telegraph and telephone systems promote the distribution of goods by transmitting selling terms, conditions of trade, and schedules of trans-

portation. Similarly, an efficient office conserves time and energy. The production and distribution of goods today would be greatly handicapped, if the co-ordinating activities which bind our enormously complex business systems together had not expanded into what we call the modern office.

The simplest form of a business organization would consist of an individual producing all that he needed—food, clothes, shelter, etc. Such a person would need no records, would not need to send out orders to employees, or provide means to receive and file reports. He could dispense with all buying, selling, and collection systems, and his only “welfare work” would be the satisfaction of his own consciousness of hunger.

With the progress of society, men gather by the thousand in factories, using tools and machines, and turning out goods to supply whole nations. The larger their business enterprises grow, the more difficult and important become the problems of management. Orders must be given to employees by the managers, and reports of work performed must be recorded. Inspectors, superintendents, foremen, senior clerks, and office managers increase in number—their function being to keep the employees and machines working harmoniously. At first one of these supervisors can give instructions verbally and keep the details in his memory, but as the subdivisions of work increase the necessity grows for continual communication between the various ranks of authority. Letters and memos, production orders and work tickets, speaking tubes and telautographs, cost statistics and controlling accounts, time clocks and messenger boys, multiply to keep pace with the growing complexity of business and to save the time of executives and workmen alike.

The modern office is a congeries of such co-ordination and economies. The office force, occupied with such tasks,

is no more unproductive than the factory machinists, or the crew of the train which carries a load of wheat from Minneapolis to Chicago. Each group is necessary to modern large-scale production processes, for as each machine needs its tender, so does each tender need to have his efforts co-ordinated with those of every other man, if the productive gain due to specialization is not to be neutralized by the wastes due to misjudgment, friction, and unbalanced production. Specialization is only one-half the cause of modern industrial development. Co-ordination is the other half. A modern, highly specialized business enterprise would be as helpless as a jellyfish, if it did not have its specialized activities controlled and co-ordinated by a highly developed office.

Early office activities were closely associated with correspondence and bookkeeping and, since these were not considered important agents in the promotion of business, the office work was naturally looked upon as an unproductive expense. Books of account and letters, after a brief transitory usefulness, were relegated to the domains of "records," useful merely as the documentary evidence of past transactions. But the modern corporate organization and the newer industrial enterprise have turned bookkeeping into something more vital; the financial budget, controlling accounts, cost keeping, perpetual inventories, and the like, are not merely records of past achievement, but are standards of performance or current information essential to guide the policies of business executives. The correspondence of business has been similarly affected by the development of advertising and modern mail-order methods. Correspondence files, instead of being dead depositories for closed transactions, are today active and prolific sources of new business. Even the collection letter, with such a house as Marshall Field and Company, is no longer the old-time dun, which simply "got in the money," but has been turned into an active construc-

tive agent, whereby weak businesses are made strong and "bad risks" are elevated to the credit grade of an "A No. 1" customer.

Wrong economic concepts, once fixed, die hard, but the long-distance record is held by the "non-productive" theory of brain work. In the ranks of industry, the men who supervise, plan, and schedule the work, handle systems, compute figures, write letters, and the like, have been often classified as non-producers. Even today the suggestion in the word "non-producer" often creates an unconscious prejudice against the worker whose labor, though essential, happens to be indirectly applied, and the first impulse when retrenchment is considered is to "slash into the overhead" on general principles. The fact is that the work of the office is highly productive. The file clerk is just as essential to the steel business, under modern conditions, as the puddler. Just as the harness upon a dray horse helps the latter to draw his load, so the office system facilitates the whole work of production and distribution. The man who would dispense with the harness because it is indirectly responsible for results, would probably be capable of reasoning that he had now increased the profits by lessening "overhead charges," since he was now using "direct labor" solely in making the horse pull the load by his tail.

When it is seen that the activities of production and distribution are made possible only through the operations covered by the term "office work," then we approach the truer appraisal of the office as a necessary economic factor. The office managers and employees cease to be passive agents in the promotion of business and their labor is no longer charged to a non-productive account. They at once rise to the dignity of active forces which furnish constructive ideas, and co-ordinate the activities of the business into smoothly working units of enormous size and power.

The purpose of this book then is to lay down the basic principles of office administration in its widest sense.

To do this in a categorical manner would be a simple matter, but to state these principles in connection with examples of successful practice—numerous and vital enough to carry information as well as conviction to the reader—has called for extensive research among many types of business and among many methods of operation. A glance at the contents will show that such an investigation could not be carried on by the author without the unselfish co-operation of a number of other persons. I wish therefore to express my feeling of obligation to Harry A. Hopf, organization expert, who furnished the method and forms used in making an analysis of an office layout; to John M. Clapp and Eskholme Wade of The Ronald Press Company for editorial assistance as well as valuable suggestions pertaining to subject matter—especially for Mr. Clapp's contribution to the subject of the language of business.

It would be impossible to give due credit to all the persons who have united in the efforts which make this book possible. Among the many executives, however, who have contributed liberally of their experience and advice, the author wishes to thank particularly Wallace Clark, Office Manager of the Remington Typewriter Company, who placed at his disposal his office manual and furnished a number of cuts for the chapters on the stenographic department; Walter D. Fuller, Comptroller of the Curtis Publishing Company, for many original papers on bonuses, standardization, time studies, and other investigations pertaining to the office; A. S. Donaldson, Educational Director of R. H. Macy and Company, who presented a complete report of his company's educational work, and O. G. Van Campen of the systematizing department of the Yawman and Erbe Manufacturing Co., who furnished valuable original material upon filing systems.

I feel personally under great obligation to Madison N. Cartmell, Eric Bodine, and Edmund R. Rex, assistants in the Department of Management, New York University, for the aid given in many investigations connected with the purchasing, sales, and accounting departments of large offices.

Forest Hills, L. I.

LEE GALLOWAY.

October 15, 1918.

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OFFICE MANAGEMENT

PART I

PRINCIPLES OF OFFICE ADMINISTRATION

CHAPTER I

THE FIELD OF THE OFFICE MANAGER

The Office Function

The organization of a business is the mechanism by means of which the plans and orders of its executives are carried out. The factory manager first plans the making of his product, and then, through his organization of buildings, equipment, and men, drives forward to the goal of a manufactured product. The financier, after planning his campaign for raising money, sets about the realization of his project through the organization of syndicates, brokers, and banks. The marketing manager plans a selling campaign and the organization of his advertising and sales departments transforms these plans into sales and orders. Thus, throughout all the ramifications of business there exists this close relationship between planning and executing.

In every business of any size the various kinds of clerical activities are classified and segregated into separate departments in charge of an executive head. Each department works "on its own," so to speak, each is responsible for the carrying out of certain routine duties, and each is more or less self-centered, coming into contact with other departments only in so far as the work of one department bears upon or directly affects that of another. A business, however, is a complete organization which is only divided into departments for the purposes of convenience of management and of specialization in distinct spheres of work. It still functions as a whole, the departmental division being a convenient arrangement for carrying its plans into execution.

Execution implies *control*—control of the factory organ-

ization—control of the financial organization—control of the marketing organization. It is the work of the office organization, under the supervision of the office manager, to devise records, methods, and systems for carrying out the function of control and for co-ordinating the activities of one department with those of another.

Figure 1 shows how these activities converge in the office division under the control of the office manager.

This function, therefore, is not limited to the supervision of a few clerical activities connected with bookkeeping, stenography, filing, and other miscellaneous office work—as is sometimes supposed. This is altogether too narrow a conception of its field. The lines of the office function weave in and out of every department of a business and every transaction into which it enters. It is the co-ordinating element which binds the various activities together and provides a permanent record of results.

The Office Manager the Co-ordinator of Office Functions

The connecting link between these various activities is an order or report of some kind. A customer's order is a request for goods. The sales department transmits this order to the factory, where it is translated into the terms of a production order authorizing the manufacture of the goods. When their manufacture is completed, the shipping department is notified by another order to send out the goods. The shipping department, in its turn, sends a notice to the accounting department to record the shipment and notify the customer of the dispatch of the goods by means of an invoice—which in effect is an order to pay for the goods.

Each step of a business transaction is thus controlled, first by an order which the office issues to start the machinery of business going, and then by a notice or report issued by one department to inform another that its part of the work is

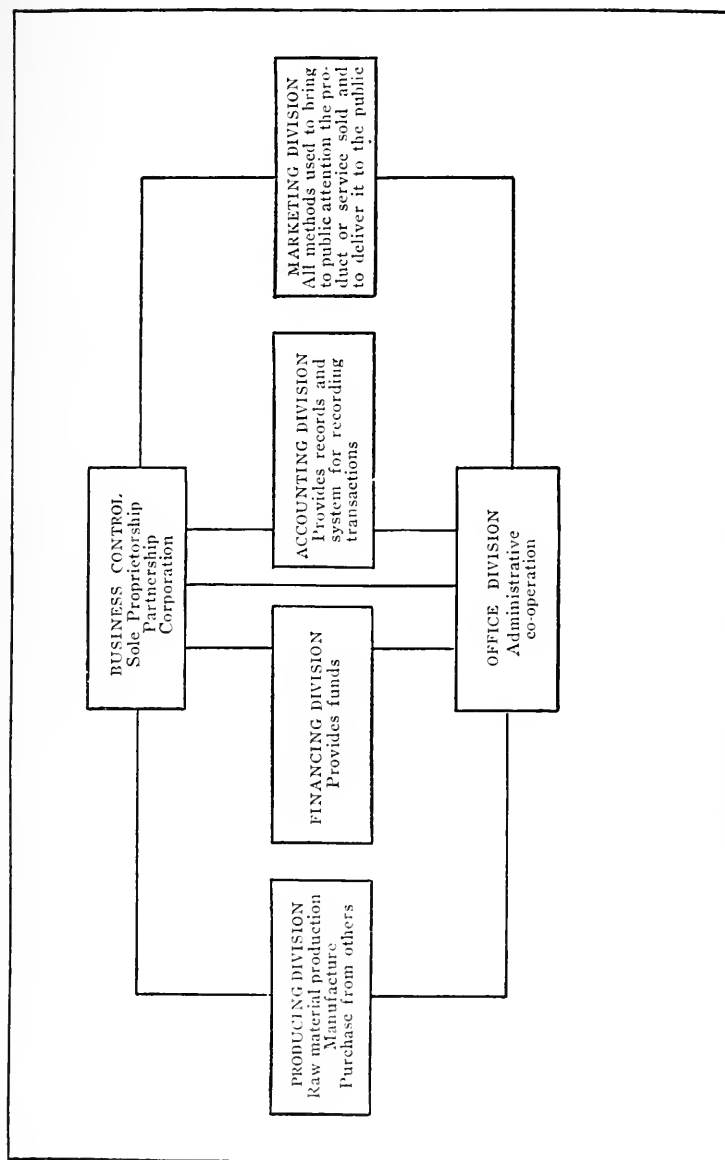


Figure 1. General Organization Chart
Showing relation of the office division to the business control in general.

completed. Progress reports are sent by the productive departments to the factory superintendent's office; shipping notices are sent from the shipping room to the invoice section; the customer sends back an acknowledgment of the receipt of the goods—and so on throughout the whole intricate process of recording the financial and other facts of the business transaction.

The order and the report, therefore, constitute the basic records of the office. These documents link department with department and trace out the field of supervision covered by the office manager.

Figure 2, representing the organization of an electric lighting company, shows the important part played by orders and reports in the administrative program of modern business. Thereon are illustrated the course of an order, and the duplicates growing out of it—from the customer through the various office departments until it has been filled and the records relating thereto are collected in the files. Figure 3 illustrates the orders and reports in their relation to the administrative control of the physical work.

While it is not the intention of this book to cover the factory side of organization and administration, it is well to keep in mind that the office function covers this field, as well as the department usually included in the term "office."

The Office Manager's Job Is What He Makes It

In some organizations the superintendent or factory manager is nothing more than a chief foreman in charge of the factory employees and the mechanical equipment of the plant; in other concerns he is an executive who gives orders to, or receives reports from, the operating end of the business. In other words he is an officer of the company, because his work counts in planning as well as in executing the plans of the business.

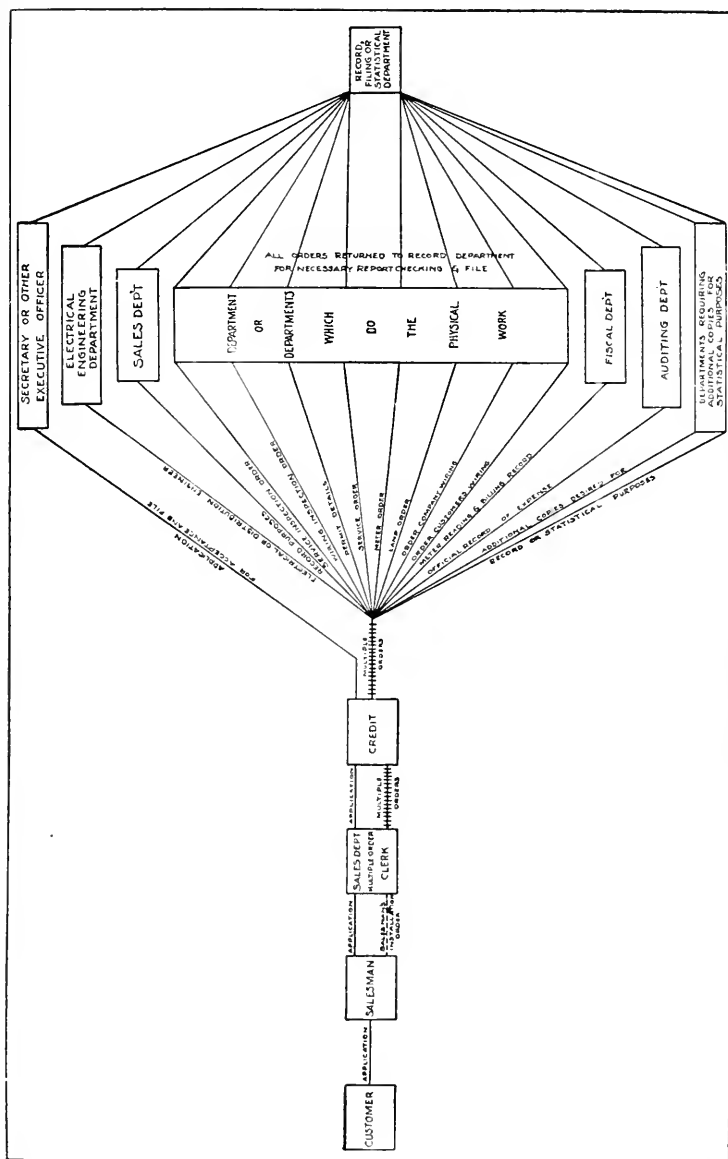


Figure 2. Route of an Order

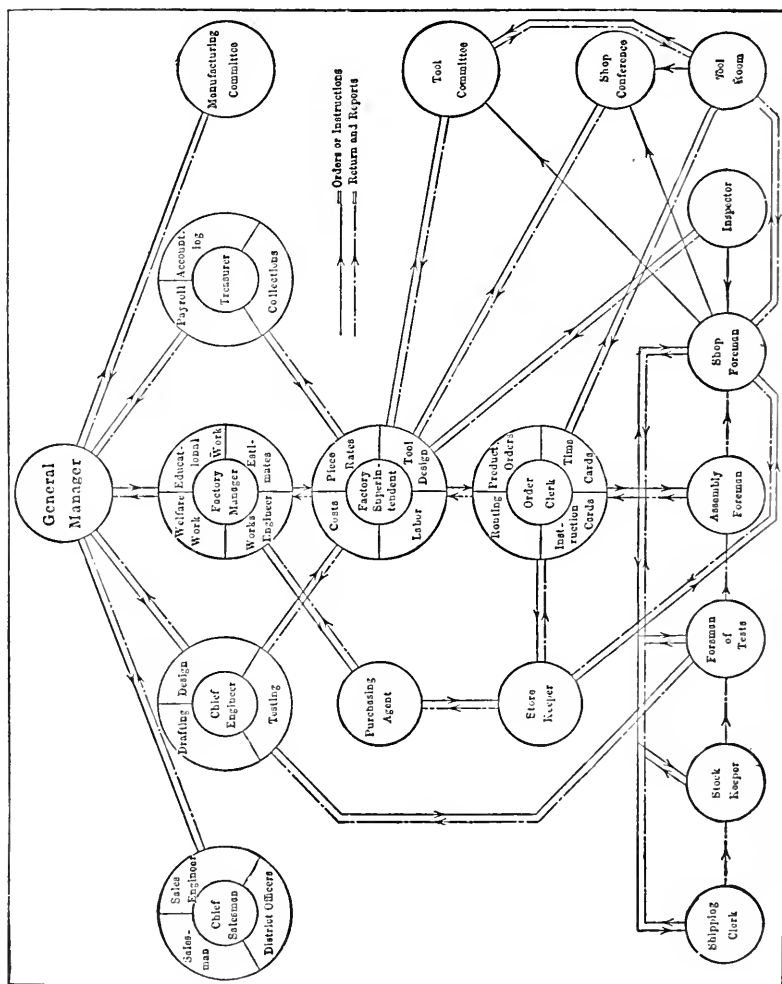


Figure 3. Administrative Diagram
Showing control of operations by orders and reports. (From Kimball's "Principles of Industrial Organization.")

An examination of the office function shows that the field and the responsibilities of the office manager may vary to the same extent. Some managers are little more than chief clerks of the accounting or correspondence departments; others may exercise general supervision over the work of stenographers, typists, filing clerks, telephone operators, messenger boys, and other office employees; while others again delegate the supervision of much of the office detail to subordinates, so as to be free to control and co-ordinate the office work as a whole.

The office manager who conceives broadly of the duties of his position, does not have the accounting details under his direct supervision—a head accountant is in charge of them; he does not hire stenographers or typists or messenger boys—an employment manager does this; he is not concerned with the routine or the detail of the credit, or purchasing, or any other department—competent department heads direct their activities. But when the activities of any department are such that the plan of their execution affects the office work of other departments, it is largely the function of the office manager to co-ordinate such activities. The head of the purchasing department or the credit department, etc., may wish to introduce new methods, or adopt a “fine system” which requires the co-operation of other departments; before the plan can be safely adopted, it must first meet with the approval of the office manager. His advice as an executive is asked and taken on any question, plan, or project which requires that adjustments be made between the office work of one department and that of another.

Thus in one case the office manager may have the title of “organization officer” and be a vice-president of the company; in another he may be the comptroller and treasurer; in still another he may hold the title of secretary and act as business manager. Whatever the title held, the fact remains that the position is largely what the man himself makes it. Only the

man who exercises general supervision over the business plans and policies that are carried out by the clerical workers of a concern, acts in the capacity of, and can be truly termed, its office manager.

The Making of the Office Manager

Office administration is growing in complexity every day and the old narrow systems must either be made elastic enough to stretch out and cover the new activities, or men who fail to measure up to their responsibilities will be superseded by keener business men who see the office function in its true perspective. The need in every branch of business administration is for men able to assist intelligently and constructively in the preparation of plans and in the systematic control of details. No junior clerk, however obscure his position, can long remain at the bottom of the ladder, if he has the ability to organize and control the work of others. Such ability must inevitably come to the attention of his superior officer. The passive qualifications of age, length of service, and so on, which were long the determining factors in the promotion of employees, are now being supplanted by the more positive qualities evidenced by the capacity for mastering details and improving methods of work, supervision, and control.

The frame of mind with which an executive approaches the problem of office management will have a great influence on his future career. His position will remain that of a subordinate executive if he sets out with a narrow conception of the sphere of his work. No man can rise above his own conception of the possibilities of his job. A man with organizing ability develops in measure as he is ready to shoulder responsibilities. Therefore, a comprehensive view of these responsibilities and a determination to measure up to them, will set the potential office manager on his way with a winning stride from the start.

CHAPTER II

DEVELOPMENT OF THE MODERN OFFICE

The Mobility of Modern Industry

Modern facilities for the transmission of power, the transportation of goods, and the dispatching of information, have exerted a profound influence upon the organization of production, distribution, and office activities respectively. The effect of the development of power transmission upon production is familiar enough. When a factory or mill depended upon the waterfall for its power, the range in the selection of a location was limited. The coming of steam power enlarged the radius of productive operations, but the choice was still restricted until the railroad and steamboat permitted greater mobility of the fuel supply. Today as electricity and gas come into greater use as sources of motive power, they bring to bear a new influence upon the location of industries. Instead of a factory being compelled to select a site where a steam power plant, with its attendant smoke and fumes, is permissible, a location may be chosen miles away from the primary source of power. In proportion as this influence makes for economies in operation, so will the present regulations pertaining to the selection of factory sites tend to change, and the economies involved in the choice of location grow in importance.

Also changes of similar importance have been taking place in distribution, owing to changes in the means of transportation. Through freights, express trains, and pipe lines have modified methods of marketing and distribution in a striking and fundamental way. Wholesale and jobbing houses are giving way to agencies, and the local store must now

divide the retail trade with the chain store, the mail-order house, and the department store. The studies made by these concerns in the economies of store location furnish some of the most interesting examples of the control of distribution by means of a central office organization which holds the reins of management over hundreds or even thousands of stores.

The Economy of Centralization

While these changes in the economic location of production and in the facilities for distribution are a subject of obvious and frequent comment, the changes which the office and its administrative activities have undergone, as a result of the development of means of transmitting information, are seldom thought of or referred to. Yet one has only to contrast the complexity of the relationship of the modern city to the outside world with the parochial or purely local character of the commercial cities of the past age, to note how startling the change has been. The transmission of information by telephone, telegraph, and wireless, to say nothing of speedy mail trains and special delivery service, enables the modern executive to control hundreds of activities at long distance.

The successful operation of every business depends upon the judgment of men capable of making correct decisions and the promptness with which these decisions are communicated to, and acted upon, by subordinates. In one building in New York City are collected the administrative headquarters of several hundred business houses, many of them of national or international importance. The underlying reason for this concentration is that if the policies of a business organization, which extends over a whole state or nation and even has an international status, can be decided upon in one place, and these decisions can be instantly communicated to all the interested parts of the organization, such a concen-

tration means large economies. Without these facilities of communication no business of any size could be successfully operated today.

Modern and Ancient Business Methods Compared

Take a single illustration—the handling of a transaction involving credit information obtained at a distance. The gulf between ancient and modern business may be realized if we imagine a modern banker compelled to send a personal representative with every ship upon the cargo of which he had loaned money. Owing to the lack of information and the lack of control over business transactions carried on at a distance, the early Carthaginian money-lenders who, it is said, introduced the principles of bottomry, i.e., the lending of money upon the bottom of the ship, were compelled to send an agent with the ship to receive payment of the loan as soon as the cargo was sold. Compare with that method the banker's draft of the present day, or the transmission of money by telegraph and cable, or the methods of the modern insurance company.

Examples of Centralized Office Control

The last case cited furnishes a striking illustration of growth based on highly centralized office control. The success of a life insurance company largely depends upon the reduction of the risks which it takes in insuring individuals, the economy with which it can carry on the inspection, and the celerity with which it can close the contract. An applicant who is physically fit and is prepared to take out a heavy life assurance may be an unsafe risk because of his occupation and environment or his inability to meet the financial obligation involved. Furthermore he may live in any part of the North American continent. How is a decision as to the suitability of the application to be reached? Obviously, a

highly organized system of inspection, capable of covering the population of the United States and Canada, is the first requirement.

The final decision in each case, however, must be handled by a staff of experts, and it is obviously impracticable to cover the continent with these highly paid officials. Therefore this work is centralized at the home office, which furthermore controls a large staff of district inspectors stationed at central points, and these in their turn control a still larger corps of local agents or correspondents who are scattered throughout the land.

Such an organization, involving as it does in one case, one superintendent and thirteen clerks in the home office, with ten district inspectors and 30,000 correspondents in the field, must be tied together by a thoroughly reliable system for the collection and prompt transmission of information.

The old Carthaginian money-lender with his half-dozen agents sailing over the Mediterranean and the North Sea might hear from a venture within a period of from six months to two years. The Equitable Assurance Company must hear from and pass upon 90,000 risks per year. To do this economically requires the perfect co-ordination of the work of the home office with that of the district and field forces which come in direct contact with the solicitor and the customer. Speed and accuracy must pull a parallel course in the handling of inspections. Under ordinary circumstances 300 reports reach the home office daily and at times these approximate 600. Although these reports are made up from information gathered from remote points the home office is able, in the great majority of cases, to render its decision and notify the local agent of its decision before the policies are received by the latter, notwithstanding the fact that 33 per cent of all policies issued are sent out from the home office on the same day that the application comes to hand.

Economy of Mass Control

Thus we see that if development in power transmission and the use of machinery have brought about division of labor and mass production—changes which have revolutionized the economic world of production and distribution—so have the postal service, the telegraph, the telephone, and the wireless brought about an equally important change in the field of administrative control. One central office can direct the policies of hundreds of scattered productive and distributive units with a comparatively small force of highly specialized employees under the direction of a few experts, whose services the separate units of production and distribution could not afford to employ even individually. We may call this the economy of mass control. Thus, the Stone and Webster Company, by centralizing administrative control in its Boston office, can give to a small gas plant in Oregon the advantages of a scientific accounting system, the benefits of a highly organized purchasing system, and innumerable other aids from technical, selling, and advertising experts, the salary of any of whom might exceed the profits of the small plant in question.

Effect of Mass Control on Internal Organization

A common saying, probably derived from observing large animals in motion, is: "Big bodies move slowly." This is not true in business. The bigger the unit the more likely it is to move rapidly. A large business organization gains its chief ascendancy over smaller rivals because of its ability to acknowledge orders more quickly, turn out the products faster, set delivery dates and keep them, make fewer accounting mistakes, fewer misjudgments in extending credits, and fewer errors in collections. This is in response to necessity. Notwithstanding the advantages which go with centralized control, due to quick communication with the outside world, most

of these would be neutralized if like gain were not made in the control, the operation, and the dispatch of the internal activities of the office itself.

The head of a large Eastern wholesale house speeded up its work by reorganizing the office and equipping it with every practical device for rapid internal communication. Before the change the usual time allowed to get out an order and ship it was twenty-four hours. The new method reduced this time to three hours. The strain put upon the office activities had forced the management to remodel completely the organization—in response to necessity.

CHAPTER III

DEPARTMENTAL AND UNIT METHODS OF ORGANIZATION

The Unit of Organization

In most businesses the unit of organization is the department. In the abstract a department has neither definite form nor size nor any precise function. The name is applied to any division of work into which the activities of a particular business may be divided.

Departments vary in size from a small room to a whole floor or more. The editorial department of a small publishing concern may consist of desk room in a newspaper office. The commercial department of the United Gas Improvement Company of Philadelphia occupies a number of rooms on several floors. Although the term is vague and suggests very little as to the size or number of the activities which it segregates, nevertheless anything called a department connotes a unit of organization under executive supervision, and indicates that definite lines have been drawn around certain functions or groups of functions. Thus, in every modern business the accounting activities are grouped by themselves, while the credit, selling, purchasing, producing, and other activities tend to be drawn into a natural association or division of their own. As a business grows in size the gain in administrative and operative efficiency by such division is obvious.

Concurrently with this growth the problem of supervision and the routing of the work within each department becomes progressively difficult, while the control of the relations between departments themselves rises to an administrative prob-

lem of major importance. To avoid the temporary dislocation of business which a reorganization of personnel and a change in its supervision and location always cause, it is well to consider, before the problem becomes too acute, the principles on which the segregation of departmental activities depend.

The Centralized Office

Business offices may be broadly classified into one of three types of organization, though the lines of demarcation are by no means clearly defined. A common type, which we may call the "centralized" type, brings most, if not all, the office activities into one room or "general office." This is the type to which most businesses belong in their early stages. A few desks, a stenographer, and one or two bookkeepers are grouped together in one room, while the desk of the proprietor or manager may be separated from the group by a partition or a simple railing only. As the business grows the groups become more and more distinct, but still all the work is done in one central room. Usually this form of organization is adhered to until some one group, such as the sales section, feels it can work more efficiently in a room by itself under the control of its own supervisor—frequently the sales or assistant sales manager. Seldom does the centralized office remain true to its type after the clerical force numbers a hundred or more miscellaneous employees.

The Departmental Office

Those offices where the force is large enough to make it profitable to segregate such general service activities as typing, filing, etc., into rooms or sections by themselves belong to the second or departmental type. In such offices the work may be divided into a typing department, an accounting department, a filing department, a supply department, and the like. Here the tendency is to segregate any activity just as

soon as it occupies the attention of a large enough number of employees to justify the management in putting this group into a section by itself and under separate supervision. Such groups are really specialized departments in which each individual does the same kind of work, or work which is related to a special activity. The advantage of the departmental method of growth comes from the specialization due to supervision rather than to operation.

Mixed Type of Office

A third form of organization is characterized by a rough division of the service activities between the general office and the departments. The sales, and perhaps the advertising and credit departments, frequently employ their own filing, stenographic, and clerical help, while the other departments are content to draw upon a general stenographic force and to use the general files. This form of organization may be called the mixed type and is a common method of dividing up the office work. In fact all large offices show traces of both centralized and departmental practice, but generally they lean more to one type than to the other. The term "mixed" is applicable only to the office in which the work is about equally divided between the two different methods.

Organization Within the Department

In some offices the principle of specialization on which the departmental development is based has been applied to the internal arrangement and control of the activities of the individual department; in other words the department work is subdivided into what is called the "unit method" of operation. This is a development of the departmental plan, it should be noted, and not a departure from it. The unit method is based on the principle of subdividing certain general activities into closely allied unit operations and putting

them into convenient working groups or "teams." The departmental plan, as generally found, does not divide the activities so finely but groups such operations as typing, mailing, invoicing, etc., into departments by themselves. These distinctions are important, for the methods of carrying out the work under the unit plan are very different from the methods used under the departmental plan.

The Unit Method of Operation

Under the unit method a certain number of operations are decided upon as a unit of work and so accurately divided are the tasks that a definite time limit can be given to each. As the work of each unit is carried on according to a prearranged schedule, the manager knows at any time whether or not his force is large enough to handle any increase in work put upon the department. If he finds there is more work than any unit or group of units can attend to, he can increase the output by simply adding more workers to one or more units. This demands that the manager have a clear understanding of the nature of his office work and be prepared to devote the time and energy required to standardize the departmental procedure after careful analysis and study has been made of the time needed to complete each unit of work.

As yet this method is more generally met in other fields of business than in the office. The manufacture of clothing, for example, lends itself particularly well to the unit or "team" method, as it is sometimes called. In the highly organized mechanical industries the method is used in assembling the various manufactured parts step by step into the completed machine product. Again all automobile factories work on the principle of unit assembly, some going so far as to assemble any two pieces which may be put together and returned to "unit assembly stock."

The significant features of this method are the emphasis

put upon the analysis of the work, i.e., its division and subdivision into operations; and the close check and control of the flow of work within units and between the various groups of units. The one great advantage of the unit method of organization, as applied to either factory or office work, is that it saves time, though in the office it is not necessarily economical of labor. An instance taken from the factory office will illustrate this point.

The Unit Method in Inventory-Taking

Factory managers find the unit method useful in taking their inventories as every hour saved is then of great value. While as a rule labor is plentiful, the whole works being shut down, usually only the office force is qualified for inventory purposes. The steps in taking an inventory may be divided into three: (1) preparation, (2) actual count, (3) extension and computation. For the purpose of illustration we need only consider the third step. The computing of the inventory, which is purely an office function, is simplified by applying the unit method to the handling of the clerical work. The organization, as usually formed for this purpose, is made up of groups so distributed as to permit the work to flow from one group to another in the natural sequence of the clerical operations. The first group, for example, puts the price opposite each item on the tag; the second group makes the price extension; the third checks the extension; the fourth adds up the figures; and the fifth classifies the sheets and adds up their totals.

To distribute the work between groups the tags and sheets are placed in wire baskets and drawn from one to the next group, the fulness of any basket indicating the good or poor balancing of the work between groups. Thus the person in charge of the inventory can readily add employees to weak units or reduce the overmanned units.

The Applicability of the Unit Method

The unit method demands a close analysis of the work to be done and an equally close adjustment of the duties of the workers to correspond with the analysis of operations. The example of the method as applied to inventory-taking shows the working plan under favorable conditions. We have (1) a major operation (that of computation) which can be readily and equitably subdivided; (2) a large quantity of work insuring a constant flow; (3) a demand for speed in service; (4) an abundant supply of labor; (5) simple operations making it easy to transfer clerks from one unit group to another. When, however, an attempt is made to introduce the unit method into the regular routine of the office, many difficulties bar the way. In the first place, the quantity of work, except in the largest offices, is seldom sufficient to keep highly specialized units continuously at work. Moreover the division of the major operation into practical parts, each of which must be completed in approximately the same length of time, is difficult and in some cases impracticable. Unless the operation is so divided, one group of workers may be idle, waiting for another to complete its part of the task. This results in studied efforts "to keep busy" or in unbalanced output or "necks" as they are called, i.e., the piling up of work in one group with a consequent dearth of work in the next. Nevertheless, where service dependent upon time is of paramount importance, such a system works very effectively. Mail-order houses, insurance companies, and large banks have adopted this method in those departments of the business where orders, policies, checks, etc., must be put through in the minimum time even at some sacrifice of economy of labor.

The Unit Method in Operation

The methods employed by the mail-order department of a large New York publishing house are typical of the system

in general. The performance of a certain sort of clerical work, for instance, requires seven different operations. After carefully determining the time required for each operation and the number of forms to be handled per hour, the exact number of clerks required for each operation are seated in a group called a unit. There are seven groups in all. Their desks are so arranged that the work passes, piece by piece, from one to the other and the operations are as follows:

1. Sorting morning's mail for each division.
2. Sorting division mail into four divisions—advertising, editorial, subscription, and general.
3. Slitting envelopes by machine.
4. Taking letters from envelopes and pinning to papers.
5. Separating paid from time subscriptions.
6. Stamping paid subscription letters with rubber stamps and entering amount remitted—indicating whether check, money order, or cash.
7. Checking off entries.

It is only by such methods that mail-order houses receiving as many as 50,000 letters a day can live up to a schedule which claims to get out all orders the same day they are received. The time-saving features of this method are well shown by the experience of a large Chicago concern. Before the adoption of the unit method orders passed through four hands and the average time taken to fill each order was thirty minutes. Now orders are handled by groups of twelve employees and the average time is four minutes.

As before stated the unit method of operation is applicable only to those businesses in which a large volume of routine work needs to be handled in the quickest possible time. It should not be introduced unless a thorough analysis of routine duties, as described in the following chapter, shows that it can be practically applied in a given case.

CHAPTER IV

THE ANALYSIS OF FUNCTIONS AND DUTIES

Importance of Planning and Scheduling

If the work of the office is to be carried on smoothly, accurately, with the utmost dispatch, and with least effort, it must be planned and scheduled. To plan effectively the office manager must know what work is to be done, who is to do it and be responsible for its doing, where it is to be done and what physical arrangements need to be made to carry it out smoothly and efficiently. The scheduling of the work will indicate when it is to be done and the approximate time it requires.

To most executives the routine of the ordinary office seems of so simple a character that the forethought and analysis implied by the terms planning and scheduling hardly seem to be necessary. There is a certain amount of clerical work, clerks are hired to do it, and if they are competent, understand the nature of their work, and are told what is required of them from time to time, nothing else is required. The work will be done and is not that all-sufficient?

Such an attitude may be defensible in the case of a small office organization the head of which is capable of supervising the whole of the work, from the opening of the mail in the morning to the dispatching of the invoices at the close of the day. But when the work increases so that departmental division becomes necessary, the details can no longer be carried in one head. The office manager, who then apportions among others responsibility for part of the general office work, voluntarily abdicates his position as organizer and controller of the office activities and duties, becoming instead the head of a minor department. The common results in such a case are

all the evils of uncontrolled decentralization—pressure in one department and slackness in another, inequalities in salaries, inconveniences in arrangement and layout, overlapping of duties, and a general scramble to get the work done without any clear conception of what is being done by every person in the office organization.

Analysis of Work as a Preliminary to Planning

In planning and scheduling the office work so that the activities of all employees can be closely controlled and the routine and arrangement of the office so organized that backwash, overlapping, and lost motion are eliminated, a detailed analysis needs to be made of the functions of the office force and the duties of each employee. It is well to concede here that this preliminary investigation is laborious in the extreme, much of it at first must necessarily seem futile, while its utility, as a whole, can only be grasped when the data gathered by the analysis is properly sifted and formulated.

To present any cut and dried methods of making an analysis of routine and duties which would be applicable to all cases is, for obvious reasons, impracticable. Offices differ in their routine and their departmental arrangement and an analysis must be made to fit the needs of an individual case. The principle on which the analytical survey is based is simple and is the same in all cases, viz.: to get down in black and white as exhaustive a description as possible of just how each employee spends his time.

Gathering Data as a Basis for Reorganization

The general plan to be followed in gathering data can perhaps best be made clear by a description of the methods actually used by a typical concern.

The concern referred to, a large New England insurance company, found itself under the necessity of reorganiz-

ing its home office and readjusting it to the growing needs of its business. The forms used in making the survey and those showing the result of the investigation are comprehensive and illustrate the general procedure. The forms or blanks used, which were filled in by employees and which will be described presently, yielded information about the actual working conditions which, when fully analyzed, served as the basis for the complete reorganization of the office.

The purpose of such a survey is to obtain data whereby the activities of each department can be divided into practical working units. These should be balanced in output and arranged in sequence so that the work may flow regularly, and without undue accumulation at any one point, in the most direct line from the receipt of an application (equivalent to the order of a mercantile business) to the filing of the records and mailing of the policy (i.e., the invoice). To quote H. A. Hopf, organization expert of the company: "Inasmuch as the tendency in almost any office is gradually to depart from the scheme of organization laid down, it is of importance to make surveys periodically and in such a manner as to produce for study a cross-section, so to speak, of the entire office activities."

Statement of Duties

The first information required is a description of the duties of employees within a department. Hence a "Statement of Duties" blank (Figure 4) is sent to each employee with a request to describe the duties of his position as he sees them. To help him classify these activities with some regard to the purposes of the report, he is given the four headings:

1. Routine
2. Periodical
3. Special
4. Fill-in

STATEMENT OF DUTIES		
Name _____		Department _____
Sex _____	Position _____	Section _____
PER CENT	SYMBOL	Routine
		Periodical
		Special
		Fill-in

Figure 4. Statement of Duties Blank

On this form each employee describes the duties he performs and the percentage they bear to his work as a whole.

Routine functions are defined as those which recur every day, such as, for example, opening and sorting the mail, recording and transmitting papers, writing policies, etc. Periodical functions are those recurring regularly at intervals of a week or month, such as drawing up statements, paying medical examiners, closing books, etc. Special functions are those activities that cannot be foreseen and provided for in advance, but which are incidental and necessary, such as preparing new application blanks, printed matter, etc. By fill-in functions are meant those which, though not immediately essential, are to be performed when opportunity permits because of their bearing on other essential work, such for example as making statistical compilations, revising bulletins, and those extras which belong to every business.

The oblong space across the top of the form is divided into three sections for the purpose of showing the salary earned and the standard pay for the class of work mentioned on the form. The first section shows the grade to which the employee belongs; the second section states his present salary; and the third section gives the maximum and minimum salary for the employee's grade.

Use of Symbols to Designate Duties

As the data gathered on the "Statement of Duties" blank are to be entered on other forms for the purpose of computing the actual time spent by the employee on each specific duty, it is necessary to devise a system of symbols so that the different duties can be briefly designated. Figure 5 shows the classification of the duties arrived at and the symbols adopted to represent them.

As will be shown later, by grouping the symbols together after a departmental or office survey has been made, much valuable information may be gained about the relative importance of the routine functions and the time and energy

spent in their performance. This information affords a working basis for the formulating of plans and methods of systematic management.

SYMBOLS	
Typewriting	|
Stenography	+
Dictating to machine	^
Dictating to stenographer	✓
Interviews (between two persons)	||
Conferences (three or more persons)	=
Absent from department for any reason	⊕
Absent from office	—
Lateness	~
Unoccupied time	○
Miscellaneous work not classified	•
Revision work pertaining especially to section	±
Supervising work by section heads	◇
Reading, sorting, and routing mail	◊
Messenger service of all kinds	◈
Information service to other departments	◩
Ordering supplies	⋈
Preparing bulletins	⌘
Filing correspondence	∥
Checking figures or proof-reading	△

Figure 5. Symbols Designating Duties

By using these symbols the various duties of employees can be briefly designated on various blanks.

NAME		DEPARTMENT		SECTION		DATE		FROM		TO	
MONDAY						8:30 TO 9	9 TO 10	10 TO 11	11 TO 12	12 TO 12:25	
TUESDAY											
WEDNESDAY											
THURSDAY											
FRIDAY											
SATURDAY											
MONDAY						1:45 TO 2	2 TO 3	3 TO 4	4 TO 5		
TUESDAY											
WEDNESDAY											
THURSDAY											
FRIDAY											
SATURDAY											

Figure 6. Weekly Survey Blank

By entering the symbols shown in Figure 5 in the squares on this blank, a complete detailed description of each clerk's work for a week is secured

Weekly Survey of Work Done

Having obtained a statement of the general functions carried on by the employees, the next step is to describe in detail the work done by each clerk. The use of the symbol system explained above enables this to be done with the least time and effort on the clerk's part. A blank is ruled off into small squares, each representing a five-minute period, and headed as shown in Figure 6. A complete and detailed description of the work performed by each clerk for a week can thus be secured by entering in the proper spaces the symbols which represent the kind of work which occupied the clerk's attention during the five-minute periods designated.

[illegible]

Figure 7. Summary Sheet of Weekly Survey Blank

The blank is designed to summarize the time each clerk devotes to a particular duty in a given day.

Summary of Time Devoted to Each Duty

As one of the objects of the survey is to concentrate like duties within as few hands as possible, the work of the clerks needs to be analyzed with a view to adjusting or eliminating activities which are incongruous or otherwise poorly mated. Such an analysis is carried out on the "Summary Sheet of Weekly Survey" (Figure 7).

This blank is designed to summarize the time each clerk devotes to a particular duty on a given day. It shows the number of hours and fractions of hours spent daily on the different kinds of work as indicated by the various symbols, the symbol representing the largest number of periods being listed first. It also gives the percentage of time devoted to each duty during the week.

Record of Time Spent in Interviews

A survey which took into consideration only the actual time spent in working at the desk would leave untouched a large number of time-consuming activities which are only indirectly associated with the main task of getting the work done. Most of these activities consist of interviews, and absences from desks and the department for purposes other than interviews.

To obtain a record of the time each employee spends in communicating with other employees, a blank (Figure 8) is prepared on which he is asked to report all interviews with persons coming to his desk and also those interviews which he holds at the desks of other employees. The blank is ruled to indicate the days of the week and the business hours of the day, the latter being divided into half-hour periods. On the back of the sheet employees' names are listed in alphabetical order and each is given a number which is used as an identifying symbol in making up the reports of employees' interviews.

PERSONAL COMMUNICATIONS BLANK												
Name _____		Department _____		Section _____		Date { From _____ To _____						
	8:30-9	9-9:30	9:30-10	10-10:30	10:30-11	11-11:30	11:30-12	12-12:25	1:45-2	2-2:30	2:30-3	3:30-4
INCOMING												
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												
OUTGOING												
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												

Figure 8. Personal Communications Blank

On this blank each employee lists the communications he has had to make or has received from other employees.

An analysis of this report shows not only the number of communications which a particular employee holds with others during the day, but also identifies the individuals who find it necessary to visit him and those whom he himself visits during the course of his work.

SUMMARY OF PERSONAL COMMUNICATIONS BLANK					
Name _____			Dept. _____		
From _____		to _____		Section _____	
<p>NOTE:—List on this Sheet a Summary of Personal Communications, incoming and outgoing, stating as accurately as possible, in a general way, the reasons for such communications. If communications between specific individuals occur for different reasons, summarize them separately as accurately as possible.</p>					
INCOMING			OUTGOING		
No.	TOTAL	EXPLANATION	No.	TOTAL	EXPLANATION

Figure 9. Summary of Personal Communications Blank

On this form each employee summarizes the number of communications he has made for various reasons with other employees.

Summary of Reasons for Interviews

Having ascertained how much of each employee's time is spent in communicating with others, it is necessary to summarize the reason or purpose of the interview. A summary of this information is gathered upon a "Summary of Personal Communications Blank" (Figure 9). If communications between specific individuals occur for different reasons, the reasons are listed separately.

DETAIL OF ABSENCES FROM DEPARTMENT			
Name _____		Dept. _____	
From _____ to _____		Section _____	
NOTE:—List on this sheet all absences from department for the purpose of consulting records, procuring correspondence, documents, etc., from files, and doing all work which does not require interviews with others.			
DAY AND TIME	EXPLANATION	DAY AND TIME	EXPLANATION

Figure 10. Detail of Absences from Department

On this form is indicated the time each employee left his desk and returned for purposes other than that of interviewing other employees.

Analysis of Reasons for Absences from Department

To complete the analysis of the time spent by employees away from their desks still another blank (Figure 10) is used. This is ruled to provide spaces in which the employee can indicate the time he left his desk or department and the specific reason for doing so. These reasons of course vary, but include all absences not based on personal interviews such as consulting records, procuring correspondence, documents, etc., from the files. Among other things the resulting information indicates clearly whether or not the office files and records are conveniently located for the employees who have to use them most.

General Purpose of Survey

The many valuable purposes which a survey as described above may be made to serve will be fully explained in later chapters. For the present it is sufficient to note that such an analysis unerringly reveals the faulty arrangement and layout of departments, the overlapping of work, divided responsibilities as to duties, time lost through needless interviews, the amount of time consumed in "productive" and "non-productive" activities—in short, when sufficiently complete and made with the requisite attention to detail, it furnishes all the information required for planning and scheduling the work so that it may be done with the utmost dispatch possible with the existing personnel and equipment.

Result of Survey

In the case under discussion many defects of organization were revealed. The management of the company, however, was not convinced that radical changes were necessary until graphic charts visualized the time lost through interviews and other interruptions of work and through the zig-zag course of a policy as it traveled from room to room. The

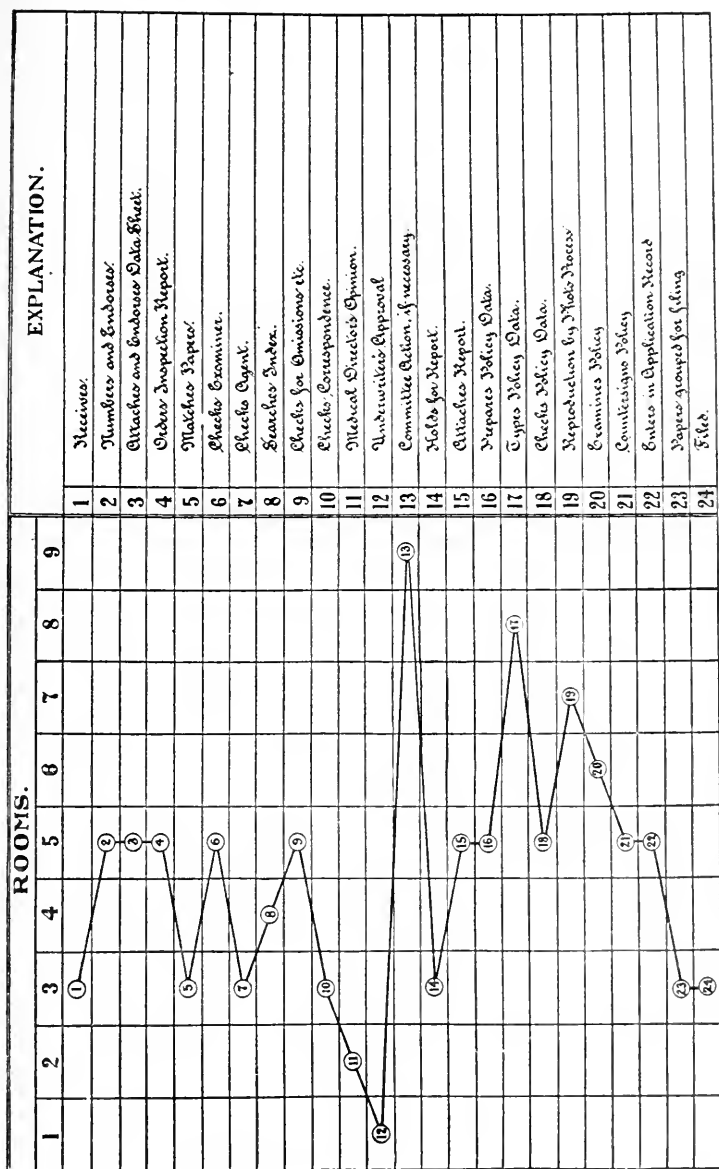


Figure 11. Departmental Arrangement Under Old Organization

This chart shows the departmental arrangement by rooms, and the course of a policy from one room to another under the old method.

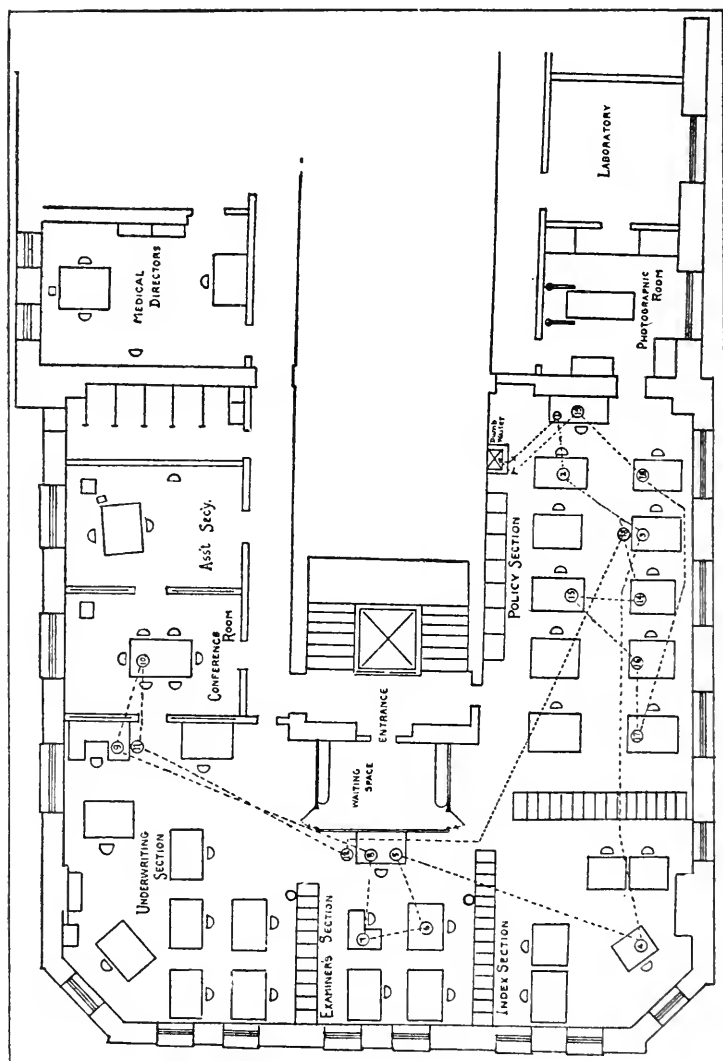


Figure 12. Departmental Arrangement Under New Organization

Under the new method the course of a policy is confined to one room; its journey is shown by the dotted lines leading from desk to desk.

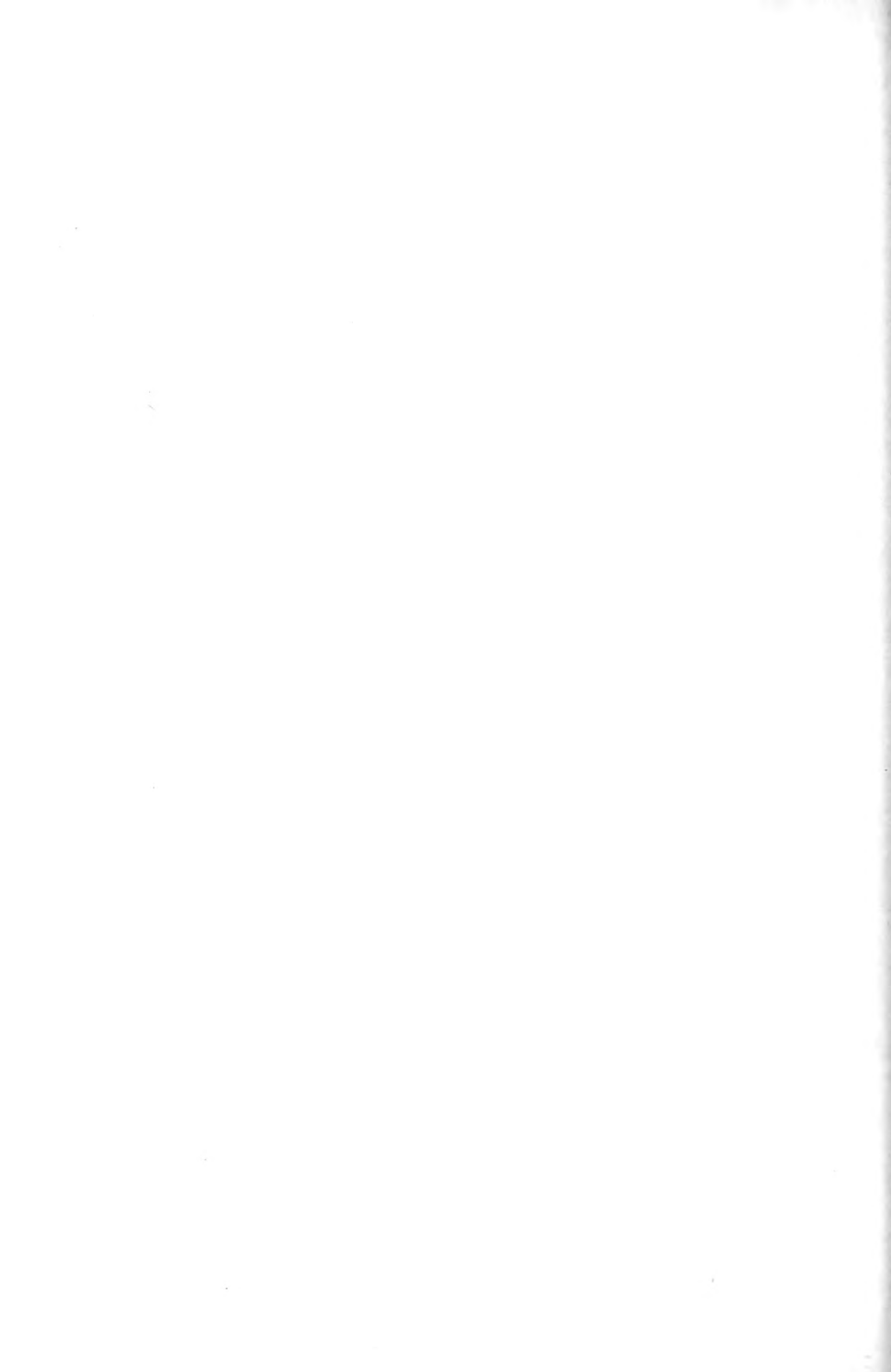
departmental activities of the company were then carried on in nine rooms. The first chart, showing the visits of employees to a particular department, showed hundreds of lines running through openings in the side of a square representing a department with its doors. These lines were so numerous that even the most skeptical had to admit that "something ought to be done." The second chart (Figure 11) on which the departments were listed in the order of their proximity to each other, showed how frequently steps were retraced in the progress of a policy through the organization.

The investigation disclosed two other important things: (1) the analysis of duties showed that in its journey through the office a policy did not require the actual presence of a clerk or a messenger; (2) the analysis of interviews showed that no direct line of communication was possible so long as the departments were housed in separate rooms. The plan of reorganization proposed, among other things, that all departments handling the make-up of the policy should be located in one open room, as illustrated in the floor plan shown in Figure 12, and that mechanical overhead conveyors should be used as a means of intercommunication. The final outcome of the reorganization was to reduce the time required to get out a policy from nearly 3 days under the old method to 3 hours under the new method.



PART II

LOCATION, LAYOUT, AND EQUIPMENT



CHAPTER V

THE SELECTION OF AN OFFICE

Adaptation of Building to Office Use

Since most offices do not occupy whole buildings their layout is not a primary consideration in the construction of the building itself. On the contrary it is a matter which is determined more or less by existing conditions. A business venture rarely starts with a large office force. Usually it begins its work of keeping records and getting out correspondence in a few rented rooms in an "office building." If it is a manufacturing or merchandising concern, the office will probably occupy a few rooms in the factory or store. Even large business organizations, such as insurance companies, seldom occupy all the office space in the buildings called by their names, and when such a concern opens a branch office, the branch follows the methods of the smaller concerns—it moves into an existing building which is remodeled to suit its particular requirements.

But these limitations imposed upon the office layout are not so great as one might at first suppose, unless the building is old or unsuited for office purposes. Owners of modern buildings generally consider the basic questions of light, heat, sanitation, and service requirements in so far as they are dependent upon materials, construction, and the design of the building. When the requirements of a new tenant call for a different layout than that existing in the departmental arrangement, the walls and partitions can be readily removed and rebuilt to conform to the desired plan. In most cases when office buildings are used for the first time, a tenant has the added advantage of directing the layout before any partitions

are erected, since the whole floor space is open and free from obstruction. Disregarding for the present the factors of layout, location, and construction of the building, let us consider the office location from the point of view of the great majority of office managers who are confronted with the practical problem of providing new quarters, or of increasing the efficiency of the old office. Before a decision is made many considerations must be weighed carefully—some pertaining to outside influences and policies, others relating to the internal factors of space, control, and dispatch. A consideration of outside factors is first necessary.

The Location of the Office Building

One of the first points to consider in selecting an office is the suitability of the location to special needs. Nearness to the post office, for example, is to some firms such an important consideration that the search for premises is confined within narrow limits. Then again proximity to the railroad station may be the determining factor for a business depending upon the visits of out-of-town buyers for much of its trade. Nearness to sources of supply or channels of distribution may be another factor. An office located in an out-of-the-way place generally finds itself with inconvenient banking connections, with less opportunity for seeing salesmen, and lacking the necessary contact with similar or allied industries. In general, districts given up to other lines of business should be avoided.

Effect of Locality on Reputation

After the district has been decided upon, the name of the street should be carefully considered. In some lines a New York address on Broadway, Fifth Avenue, or Wall Street, has a special significance. A Fifth Avenue address suggests "tone" and exclusiveness. A Wall Street number reflects the prestige of its financial environment. Publishers of books of

literary merit generally seek the Fifth Avenue environment while the high-grade business book company looks upon its office in the financial district as one of its big assets. A correspondence school, with its office situated in University Place, has an asset which it would not have if its door opened on the Bowery. Perhaps a business, even more than a person, is judged by the company it keeps.

Effect of Reputation on Business

Another consideration is the reputation of the building. Some landlords are careless in regard to the tenants they accept, with the consequence that in the public mind the street number or the name of the building is synonymous with get-rich-quick schemes. As the old adage that "birds of a feather flock together" is firmly rooted in the public mind, it is important to give proper consideration to such a prejudice, if it exists. The reputation of a building may affect the credit rating of its tenants. One concern selling an office specialty in wide demand, refuses to accept orders unaccompanied by a remittance from occupants of certain buildings. Salesmen are given a list of these buildings and are prohibited from soliciting orders therein. The list has not been made up from hearsay, but is based upon an analysis of the concern's accounts with firms located in large office buildings. This brought out that the risk in the case of some buildings was too great to permit the acceptance of further credit orders, the price of the article being too small to justify an elaborate investigation of credit rating. No attempt was made to separate the sheep from the goats.

As a rule, buildings in which light manufacturing is permitted should be avoided, unless such manufacture is complementary to the office work and of prime importance. The service, in such cases, is generally poor and the surroundings usually lack refinement. In selecting an office the nature of

one's neighbors' business must be considered, because of the effect it may have upon the prestige of a concern. For the same reason old buildings should be avoided. They are depressing in their effect on workers.

It is not to be inferred from the above that the largest and newest building is always the best. A room or two on the top floor of a modern skyscraper may be so remote as to consume a great deal of time in coming and going—inconvenient for both employers and employees. The listings on the board may be so numerous that the firm name cannot be readily found. Then again, in the more modern offices front-door and window advertising is not permitted and it may be advantageous to announce one's name boldly to the public at large.

The Service of the Building

In selecting the building some regard should be given to the service. Is the elevator service adequate to handle, without loss of time, employees and visitors? Is there an all-night elevator service? Is ample heat provided for comfort during the coldest months of the year? A shivering office force is not conducive to good discipline or cheerful service. The quality of the janitor service and the sanitary system should be investigated. When the office force consists mainly of girls, the matter of rest rooms is an important factor. In the modern up-to-date office building this detail is generally well taken care of.

Location Within the Building

In selecting a location within the building itself, several factors need to be considered. A location above the surrounding buildings, say the seventh floor and over, is generally the best. The fifth floor should be the lowest limit if the street is noisy. As to outlook, the outside distant view is considered

preferable. The outside view over a large court is the next best, while the outlook upon a small court is the least satisfactory. If choice is possible as to exposure, the east is generally found best, north a second best, with south following as a third. The west, because of the afternoon sun, is considered least satisfactory.

It must be remembered that every office building has both advantages and disadvantages which need to be weighed against each other and a balance struck in conformity with the needs of the business.

Access to Supplies and Equipment

The influences which induce factories of like kind to "hive" in one locality, such as the hat factories congregated in the vicinity of Astor Place, New York, are at work when the business man seeks an office location. A district filled with office buildings makes it possible for certain clerical activities to be carried on therein with the maximum economy. It is obviously more economical for business in general to have the big typewriter companies, with their repair shops, supply rooms, and expert machinists, and the office supply houses with their thousand and one items, all located within call, than it would be if the services they rendered were delayed by distance or their specialized work could not be procured locally. A big office supply house performs the same kind of function for the business man that the bank does. The bank carries the minimum amount of currency required to meet the average demand and can afford to employ specialists to handle the business of special departments. The office supply house carries the minimum stock necessary to fulfill the daily demand and also offers the expert service which is alone possible when specialization can be made to pay. By studying the demand of the district for repairs and new machines, correspondence supplies, and the multitudinous re-

quirements in office stationery, supply houses can carry stocks with notable savings in storage, handling, and distribution for all parties concerned.

Advantage of Quick Access to Supplies

How advantageous this is to the office centrally located, can easily be seen. Thus, in the office of one large trust company, only a two or three weeks' supply of stationery and other materials is ordinarily carried, because when the bins run low they can be replenished within a few hours from nearby supply houses. When office space rents from one to two dollars a square foot, every inch taken up by supplies unnecessarily carried adds to the overhead of the business. Therefore, when outside and cheaper localities are being compared with those of the acknowledged business centers, the extra space needed to carry and care for stock, the delays which arise in emergency, and the less expert character of the help, etc., should be weighed against the savings in these respects offered by the numerous concerns which cater to the mechanical and supply sides of modern business.

Relation of Location to Getting and Keeping Employees

The first question a prospective employee asks himself when reading "Help Wanted" advertisements is, "What's the salary?" the second, "Where is it situated?" To hundreds of businesses in New York and other large cities, the facilities for hiring the right kind of employees and keeping them when hired is the determining factor of their location "in the heart of the metropolitan district." It is common knowledge in New York that an office in Manhattan, say within walking distance of Forty-second Street, Astor Place, or Battery Place subway stations, can secure employees from the Bronx and from Brooklyn with greater facility than it could if the office were situated in the Bronx or Brooklyn. Probably no

more definite reason can be given for this than the "lure" of certain localities.

Office location should also be judged from the point of transportation service. Dependability, carrying capacity, and fares should not be lost sight of. Time lost in tardiness, the sapping of the employees' energies by hanging to a strap from thirty minutes to an hour and even more in a crowded and poorly ventilated car, are matters worth considering. One New York down-town employer considered that it paid him to specialize on Staten Island clerks since the ferry service provided comfortable and restful transportation, while the half-hour or more in the fresh air acted as a tonic both before and after the day's work.

Noise, Dust, and Odors

The manager of a New York office noted that the efficiency of his force fell off fully 25 per cent on Fridays. The odor of fried fish, rising from a restaurant below, continually diverted the minds of the workers, brought out frequent ejaculations of disgust, and so irritated the office force that it was thought to be cheaper to move into other quarters at an increase in rent.

Noise is another factor which handicaps the concentration of the office worker and irritates his nerves. Not only is this true of the force in general, but especially of the persons whose duties call them into frequent conferences or interviews. Committee rooms should never be exposed to the constant rumble, shrieks, and cries of the street. The effort to talk against such distractions is wearing in the extreme.

While, adequate light and ventilation are usually thought of as necessary requirements for an efficient office, noise and dust are given little attention. Dust is not only a carrier of germs but it makes working conditions uncomfortable. Desks, furniture, papers, and machines covered with grit breed in-

difference to neatness, accuracy, and many other virtues of an efficient work place. The matter of dust prevention is related to that of ventilation. Unless special provision is made, the windows that serve for ventilation may admit noise and dust enough to counterbalance the good effects of fresh air.

The Location of the Factory Office

Much would be gained if more attention were given to the location of factory offices. When a factory is planned the attention is focused naturally upon production, the office requirements are frequently slighted, and as a consequence they seldom fit the business. Moreover, any effort to better office conditions is generally confined to the search for a more commodious or convenient floor or a rearrangement of the departments in the factory building. Seldom does the alternative exist, or if it exists will be taken, of moving into a new office building. It is highly important accordingly to find the best place available within the building.

That part of the building which houses the co-ordinating activities of a factory should protect the clerical workers from untoward conditions as well as provide for the safety of valuable records. It is not enough for the building to be fire-proof or slow burning. Thoroughly isolated vaults should also be provided for records, drawings, and the like. If the factory floors are wooden, the vault floors at least should be of concrete and the walling-in structures so separated from the rest of the surroundings that a general fire would still leave the vault intact. Natural lighting, isolation from outside disturbances, safety against fires—these are factors which need to be given the same careful consideration in the design and construction of the office departments that is given to the shops and other production departments.

In a multistory factory building the location of the office within the factory itself vitally affects the efficiency of the

clerical force. Dust and noise must be coped with at short range and constant contact with the factory operations provided for. Experience proves that an intermediate floor meets the latter requirements better than one at the top or bottom of the building. If the building is not made of concrete, many devices are employed to lessen the annoyance of noise, such as the use of suspended ceilings of matched boards, metal lath and plaster, stamped metal, or other light and suitable materials.

When the outside factors are detrimental to the location of an office, an analysis regarding the advantages of a different location should be made and weighed against the expenditures involved in removal. If the office force works under any of the handicaps of noise and dust, or lack of light, space, and air, the necessary outlay required to remove these drawbacks should be regarded as a sound business investment.

Provision for Future Expansion

If every business man had capital enough to meet all the requirements which he sees will be necessary for the future expansion of his business, there would be little need of cautioning him against precipitate decision in the matter of office location and layout. But the majority of businesses start with a limited amount of capital and are usually compelled to meet extensions out of income or from borrowings dependent upon the credit which the profit insures. As a consequence not much thought is given to the question of expansion, and whenever it does force itself to the front it is deferred with the thought, "This bridge will be crossed when we come to it."

Probably no expenditure is so grudgingly incurred as that on the office. It is generally referred to as "non-productive" and consequently office extensions are usually the last thing to be considered. Yet future needs are not difficult to anticipate and can be provided for without an expenditure dispro-

portionate to the benefits derived. When the office is rented, the manager should see if future space requirements can probably be met by the leasing of other rooms or floors in the same building. If this can be satisfactorily done, then he can insure future requirements by taking an option on such space as, in his judgment, will be required within the next two or three years. By that time the business will probably have struck its stride and be showing the natural pace of its progress.

In case a building is especially designed for the office force, there is no excuse for the short-sightedness that fails to provide for future growth. This does not mean that a large outlay in buildings and equipment need be made long in advance of requirements, but that the building should be so constructed as to permit of additions being made with economy and without unnecessary delays which are expensive because they encumber progress.

A case in point is to omit a basement in the original plan of construction. Later on, the accumulation of records, dead files, and catalogues or some new need calls for extra storage room. A basement is the best and cheapest location for such material, but to excavate after the building is erected costs from two to three times as much as to provide for it in the first place.

CHAPTER VI

LEASING AN OFFICE

The Form of the Lease

After the preliminary negotiations regarding the renting of office space have been satisfactorily concluded, the question of signing the agreement in legal form comes up for consideration. The landlord wants to bind the tenant to occupy the premises at a certain rental for a definite period, subject to conditions which are agreed upon. The tenant wants to be assured of a permanent place of business from which he cannot be removed during a specified time, and that the conditions stipulated in the agreement shall be fulfilled. After a lease is made out the rent cannot be raised, except as provided for in the lease.

The lease may be oral or written. In many states it must be in writing, if for more than one year. In some states it is not necessary that it should be in writing, unless the tenancy is to run for three years or more. But regardless of what the legal requirements may be, common prudence dictates that the rights and obligations of each party be definitely recorded. Duplicate copies of the lease are usually made so that each party may have a copy.

Points Covered by the Lease

Leases generally include and cover the following essentials:

1. Names of the parties to the contract.
2. Date of the contract.

3. The date and sometimes the hour at which the term begins and expires.
4. Description or designation of the space leased.
5. The rental and method of payment. Usually the annual rent is stated, subdivided into smaller units to be paid on specified dates.
6. Provisions regarding the rights and obligations of each party and what will be held to nullify the contract.
7. Signature of both parties to the contract.
8. Acknowledgment before a notary when required by statute.

The Wording of the Lease

As practically all leases are drafted by attorneys representing the landlord, the document is usually so worded as to protect his interests in every way—sometimes to the disadvantage of the tenant. It is true though that tenants are not always financially responsible, and that their property may be protected from execution under some exemption statute; whereas the building serves as security for any claims against the landlord. If the tenant should break the terms of the lease, causing a loss to the landlord, the latter may obtain a judgment but find that he cannot collect.

In most states office furniture and fixtures cannot be held, if the tenant sets up the claim that they are essential to him in earning a living. For this reason the landlord makes the terms and it is very difficult for the tenant to have any of the important provisions of the lease changed. Moreover, the various points covered in the agreement are generally those that have been legally tested, and the landlord does not want to run the risk of inserting other clauses which cannot be enforced or the effect of which may be uncertain. Minor points may, however, be conceded, depending upon the circum-

stances of the case and the attitude of the landlord. Whatever the form of the lease, the tenant should carefully consider just what the various provisions entail, otherwise he may sign his name to a document that is at variance with the verbal agreement; or bind himself by certain provisions which, though ostensibly just, may by their implication run counter to his business plans.

Authority of Agent or Broker

The parties to a lease are the landlord, or the owner who lets the property, and the tenant who rents it. A renting agent is generally given the authority to rent property, to receive the rent, and to give a receipt for the money collected in the name of the landlord. The extent of the authority of the agent depends upon the agreement between him and the landlord. If the landlord acquiesces in the acts of his agent, the latter's authority is implied or established. If the agent is only appointed to rent and collect rent, he has no authority to consent to a transfer of the lease when the occupancy is for a term of more than one year and under seal. An agent generally is given authority to allow deductions to be made from the rent for the cost of minor repairs, but not for extensive improvements—such as the removal or setting up of partitions, painting and plastering, etc. The agent has no authority to execute a lease unless express power to do so is given him by the landlord. In New York the agent may institute dispossess proceedings to recover possession of the premises.

Payment of Rent to an Agent

An agent authorized to receive payment must receive it in money and, ordinarily, only when it becomes due and not before. He has no authority to commute the debt for any other consideration, or to compound or release it on composition,

or submit it to arbitration. If the agent collects the rent before it is due, the prepayment does not discharge the liability of the tenant unless the landlord has ratified the payment or has accepted the money paid. Payments made to an agent after the death of his principal, even if made when in ignorance of the fact, do not bind the estate. This legal technicality seems to be based on the presumption that those who deal with an agent knowingly assume the risk of his authority being terminated by his principal's death, without notice to them. It is possible, however, so to word the lease that the estate of the principal cannot recover money paid to his agent in good faith after the owner's death. The tenant is not liable to an agent for commission unless some service has been performed at his request, or unless there is some obligation, expressed or implied.

The Length of the Lease

The term of the lease is an important factor to consider. If the rent is low and the space available is sufficient for expansion, the common practice is to secure a lease for three, five, or more years. The tenant is then assured that the rent will not be raised during that period. The landlord, on his part, is generally willing to sacrifice the possibility of a larger rental because, during the period of the lease, he is put to no expense in connection with renting the office nor has he to fear a loss through vacancy. On the other hand, if the locality should deteriorate during the period, the loss would be sustained by the tenant. Generally, however, if the location is good when the lease is signed, it is not likely to undergo any radical change during a short space of time, say three or five years. Office rents, as a general rule, tend to rise with the increasing cost of materials and labor and the growth of population.

Some leases provide for an ascending scale of rental if the

lease is for a long period. This method of providing for a possible rise in rental value is more or less a speculation, with the risk thrown on the tenant. Unless there are other obvious advantages connected with the renting of the premises besides that of price, a lease of this kind is a rather risky proposition.

The Renewal of the Lease

Another important point to consider is the privilege of renewal at the same rental. If this clause is inserted, it is for the tenant to decide whether he wants to continue the occupancy or not. If the prices prevailing at the time of the expiration of the lease are higher than the rental stipulated in the renewal clause, the privilege may turn out to be a valuable asset. If in addition there is nothing in the lease to prevent subletting, it may be profitable for the tenant to sublet the office. If the business should be sold, the renewal privilege would in some cases be an important consideration. In most cases, however, the landlord stipulates for a higher rental for the renewal term, as the privilege at best is one-sided and in favor of the tenant.

Length of Tenancy Term

There are three kinds of leases in respect to duration—the monthly tenancy, the yearly tenancy, and the tenancy at will. The monthly tenancy is the shortest term that is legally recognized. In practice, it is a self-renewing month-to-month tenancy. If the tenant should remain one day beyond the monthly term, he is responsible for the month's rent. As a rule a tenant under this arrangement must be given one month's notice and the same applies to the giving of notice to the landlord. In New York the statute provides for only five days' notice. Because of the indefiniteness and short duration of the monthly term, it is rarely used in the renting of business premises. The tenancy for a number of years is

the most common and satisfactory term, the lease ending without notice on the last day of the term—usually at a definite hour. If, after that day or hour, the tenant continues to occupy the premises the occupancy may be viewed in one of three ways: The landlord may consider the premises to be let on a monthly basis until a new lease is signed; or, in the absence of any agreement, he may presume that the tenant is staying for another year upon similar terms as before; or, if the tenant is considered undesirable, or the landlord asks for an increase in rent which is refused, the occupant may be dispossessed.

The tenancy at will differs from other leases in that the term is indefinite and that there is no limit to the length of the period. The rent is usually paid monthly, but differs from the monthly tenancy in that no term is stated in the lease. The lease can be terminated at will by the landlord or the tenant. In New York City, tenancies at will end, by statute, on May 1 each year. At this time the tenant may move without notice or the landlord may take possession in the same manner.

Reasons for Eviction

A tenant is required to pay the stipulated rent or he may be evicted. But if the lease is broken in this way and the landlord afterward accepts any part of the rent due, the tenant cannot be dispossessed. The only remedy in this case is to bring suit. A tenant is required to keep all property in as good condition as found, reasonable wear and tear excepted. He is also required to protect the landlord's interest and give prompt notice of matters affecting this interest, which he learns of by reason of his occupancy.

The landlord, on his part, must assure the tenant of quiet possession of the premises leased and must protect him in that possession. If the landlord should take possession of

the whole or a part of the premises during the term of the lease, this would practically amount to an eviction and would constitute a breach of the lease on the part of the landlord. The tenant need not pay rent thereafter even if he has been evicted from only a part of the premises. If the landlord permits anything which renders the property unsuited to the purposes for which it was rented, this is termed constructive eviction. The tenant has then the right to move out and, if this be done promptly, to refuse to pay rent; if he remains he is liable for the rent.

Liability for Maintenance and Repairs

When the landlord is responsible for the maintenance of hallways, stairs, etc., he must keep them in usable and safe condition. If the lease does not provide for repairs to the premises he is not bound to make them, except where some defect in the property is revealed later which could not readily be discovered by the tenant at the time the lease was signed. As a general rule, the landlord makes all repairs which are due to ordinary wear and tear and which are required to keep the property from deteriorating. He is not obliged to replace a window broken by the tenant, or other damage done by accident or otherwise by the occupant or his employees. Should there be a leak in the water or the sanitary system due to poor workmanship, the landlord is held responsible. But if the damage is caused by the omission or commission of some act on the part of the tenant, the landlord cannot be held responsible.

The extent to which a tenant may be held responsible for necessary repairs depends upon the express stipulations in the lease. If no such provision is made, he is only liable for those repairs found necessary because of his own or his employees' acts. In the absence of any proviso for permanent repairs in the lease, the tenant is not liable for them.

Assignment and Subletting

In the absence of any clause prohibiting the assignment of the lease or the subletting of the premises, the lease is the tenant's personal property. He may assign or mortgage it as a lien on his term or right of occupancy. The first assignee may, on his part, assign the lease to some other person and in these transactions the assignees need not come in contact with the landlord as the original tenant is held responsible. If, however, the original tenant should fail to pay the rent and thereby give cause for the ejectment of the subtenant, the latter would have no redress. He would have to vacate at the option of the landlord, even if the assignee had paid his rent in full to the original tenant.

Usually the lease provides that it shall not be assigned to others. If an assignment is made notwithstanding the provisions of the lease and the landlord accepts payment from the assignee, the provision is deemed to have been waived. The original tenant, while bound to pay the rent stipulated, is entitled to be credited with any money collected from the subtenant. The latter cannot be held for the rent stipulated in the lease unless an agreement has been made to that effect. The subtenant could, however, be sued for a fair rental for the time during which he actually occupied the premises.

Termination of Lease

A lease may be terminated before the expiration of the term by voluntary surrender on the part of the tenant, if the landlord accepts the offer. This surrender need not be in writing or even expressed; it may be implied by the actions of the tenant or landlord. All that is necessary is that the tenant vacate and the landlord re-enter the premises which, if there is nothing in the lease to the contrary, may be interpreted as an acceptance. Usually, however, some provision is made in the lease to prevent a technicality—such as the en-

forcing of entrance for the purpose of protecting the property—from being construed as terminating the lease.

A tenancy may also be terminated by the breach of some condition expressed in the lease. The tenant may be dispossessed for non-payment of rent or some other charge which he has agreed to pay, or for unlawful use of the premises. If any other provision of the lease is broken before the term has expired, the tenant may be dispossessed by ejectment proceedings. These are generally expensive and usually some provision is made whereby the landlord is given the right to dispossess the tenant. The conditions in the lease which do not in themselves constitute causes for ejectment may be drawn up in such a form that the condition, when violated, is made an additional rental charge if it is reducible to money; if it cannot be expressed in monetary terms it may be made to modify the length of the term.

CHAPTER VII

THE LAYOUT AND THE FLOW OF WORK

The Factors of Time and Space in Judging Efficiency

The manager of a large New York office found the space required for the work of the general correspondence department to be seemingly inadequate. The work, he at first thought, could only be handled properly by adding more space and more employees, or by rearranging the space now occupied and speeding up the work of employees. An analysis of functions and duties, as described in Chapter IV, showed that in each executive office a separate stenographic and clerical force was maintained. Furthermore, each department felt it necessary to employ help enough to meet the requirements of the "peak load" of its busiest periods. This left a number of workers unemployed during a considerable part of the day. The manager proved to himself that nearly one-fourth of the present space and one-third of the time of workers could be saved by a complete rearrangement of executive offices and by centralizing the work of stenographers and clerks.

Space and time are so interwoven in all problems of management, that no final judgment of the efficiency of a department or other production unit is complete without the consideration of both factors. To say that an office is equipped with the most modern appliances and employs 75 expert stenographers tells nothing about its efficiency as a working force. It tells no more than a statement which describes a boy's athletic performance by saying that he ran 100 yards. Not until we inject the time element and say that the boy ran 100 yards in twelve seconds, are we able to judge of his

performance. So with an office. Not until we know that its force of 75 stenographers can turn out so many letters a day, or handle a certain amount of clerical work within a given time, are we able to judge of its efficiency.

Routing and Scheduling

In speaking of the working efficiency of a department in factory or office, when we wish to emphasize the importance which the space factor, i.e., the arrangement of the office, plays in the expeditious handling of work, we designate the flow of work by the term "routing." When we wish to speak of the element of time, we discuss the flow of work in terms of the "schedule." Because, among factory production engineers, this distinction is not always clearly kept in mind, confusion exists in the use of the terms. The difference can be made perfectly clear by taking an illustration from railroad practice.

First the road-bed is decided upon and stations are located. This is the basis of routing. Next, when trains are run over it, a time for leaving and a time for arriving at stations is set; that is, a schedule is arranged by which trains are dispatched. Thus the efficiency of the railroad is measured by the directness of the route and the time required by the trains to cover it.

In planning a new office layout, or in the rearrangement of an existing office, it is necessary to consider not only the present and future space that will be required by the departments, but so to divide the space that the layout of departments and the propinquity of one to the other will be based, in the main, upon the flow of work in the natural sequence of its operations. This cannot be done without the close analysis of office procedure already referred to.

When speed is of first importance, as for instance when orders must, so far as possible, be filled on the day they are received, the allotment of space and its arrangement become

most essential. Where work is carried on, however, in a more or less leisurely fashion, and it is unimportant whether it is finished today or tomorrow, the layout is of relatively small importance.

For example, the preparation of a large contract by the Bureau of Supplies of New York City takes 188 days on an average. The time consumed between departments is relatively small as compared with the length of time taken in the departments themselves. Little would be gained, therefore, by arranging the departments to conform to the sequence of operations or the "flow of work." On the other hand, speed may be the essential thing to be gained, even at the expense of the convenience and comfort of workers. Mail-order houses make it a rule to get out orders, which often number thousands, on the day they are received. Here space considerations are of prime importance in saving time. Every foot between the clerical operations, connected with filling these orders, counts. The routing of the work in accordance with the sequence of operations is then the chief consideration in establishing an "express" line schedule.

The Simplest Method of Planning

Most office layouts are largely haphazard and are arrived at by a series of makeshift adjustments. The routing of the work, the establishment of schedules, the allotment of desk space to departments, are matters dependent upon "business practice" in general. Shipments in many trades run "about ten days after receipt of the order." The routine of the office runs at a leisurely pace. Trial balances are required only once a month. Financial statements are made annually.

If the space in the building where the office is located is already arranged in a certain way when the office is rented, the simplest planning involves the placing together of the departments most closely related to each other. The book-

keeping, billing, and credit offices are placed in close proximity to each other to eliminate waste of time in the constant interchange of information and to avoid the temptation to let doubtful credits creep in because the credit man is not in convenient proximity to the bookkeeper, or the like. Such a layout is feasible in even a small office where the partitions are poorly placed and where the departmental arrangements depend upon years of growing up on the plan of Topsy. A little systematic planning in such a case will be worth while even if it is confined to narrow limits. Illustrations are legion, but one will suffice.

Illustration of Faulty Arrangement

An office manager was sent to act as assistant to the sales manager of a branch agency which had found it difficult to get its reports through on time. The first thing the assistant manager did was to chart the layout of the office, when he discovered the conditions illustrated in Figure 13.

The assistant sales manager's desk was situated at the entrance. He was thus continually interrupted by every messenger or visitor who came in. If he wished to confer with the manager, a long trip through every department was neces-

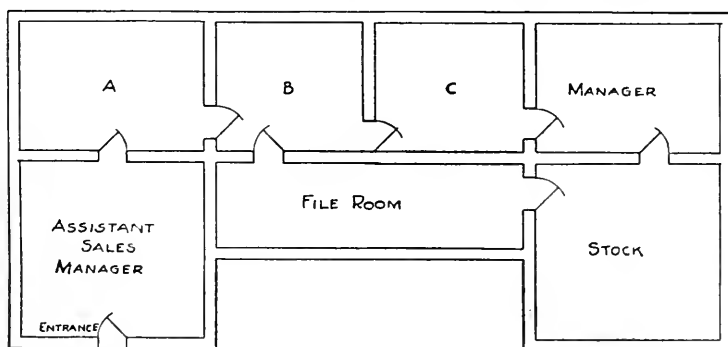


Figure 13. An Office Layout
This office is an example of faulty arrangement.

sary, thereby not only losing his own time but disturbing the clerks as well. The file room, it will be noticed, was so located that the file boy, who frequently ran on outside errands, had to pass through two departments and the assistant manager's office besides.

The order of the office work was next studied. It was found that little or no attention was paid to the arrangement of departments or desks to secure sequence of operation. Contracts and orders brought in through Department A and taken to the manager's office were, after inspection, returned again to A to begin operations.

The Effect of Rearrangement

The diagnosis of the assistant manager was, that in addition to poor arrangement, the offices were too crowded and fresh quarters would have to be found at the end of the year. Meanwhile, the first step in the direction of reorganization was to base the arrangement of departments and desks on the flow of work. To this end the assistant manager's desk was placed next to the manager's private office. Departments A and C were interchanged and the desks rearranged to permit the flow of work when it left the manager's office to go directly through to the outer office where, after passing through the checker's hands in A, the tonnage clerk in B, and on to the billing clerk in C, it was filed. The file boy's work was so arranged that he could spend part of his time at C to answer inquiries. Conditions were greatly improved by these simple changes.

Layout of a New Office

Shortly after the first of the year new quarters were found for the agency offices. After a close study of the situation in conjunction with an architect, the floor space was laid out according to the diagram in Figure 14.

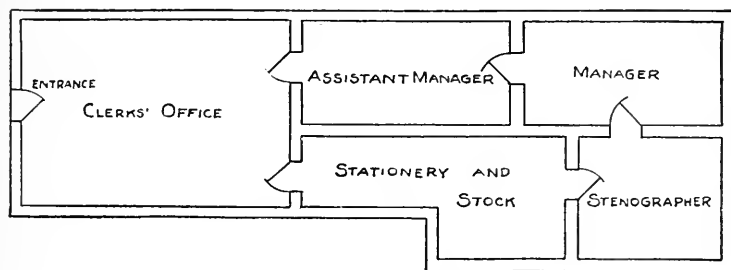


Figure 14. An Office Layout
Providing for executive's office and centralized clerical department.

In this layout the stationery and stock-room was placed out of the direct line of travel in the office; the stenographers were all put in one department; the manager and his assistant were provided with separate private offices; and all the clerks were assembled in one large central office where the original idea of arranging the desks according to functions was carried out. The company also acquired the use of part of the hallway of the building by having the freight elevator of the building open into the stock-room. That year the office not only handled more business than formerly, but did it with one clerk less and the consequent saving of money.

Layout Based on Service Facilities

The methods to be followed in the layout of a large office, even though it may occupy many floors, are fundamentally the same as those used in the case cited above. The chief aim should be to save space and time through a geographical arrangement, whereby the related departments and operations are enabled to work closely together. The important factors to be considered in bringing about this relationship are: (1) the departmental functions, and (2) the location of the stairs, elevators, chutes, and other delivery and communicating facilities.

The layout of the eleven-story building of the Y. W. C. A. New York headquarters shows especially how the facilities mentioned in the second factor may be utilized to the best advantage.

At either end of each floor is a stairway which is used for short trips up and down, saving elevator service and the time lost in waiting for it. About midway on each floor is the opening of the chute and the electric dumb-waiter. The central position of these facilities makes them equally accessible to any department on any floor—often an important service feature in determining the location of a department. Thus, the filing room is put midway down the corridor and on the floor where the automatic dumb-waiter comes to a stop. The mailing room is on the same floor and connected with the filing room by a door and slide. This last room contains the terminus of the chute which collects all the outgoing mail and intercommunications. Next to the mailing room and accessible to the chute is the supply department. This much frequented room is also situated with due consideration to the elevator and stair service. Other general offices such as the central stenographic bureau and the duplicating department are also located on the floor where the automatic dumb-waiter and chute end.

This grouping accomplishes many things. The supply room distributes its supplies by means of the dumb-waiter and chute; the file clerks can send immediately the correspondence called for to any floor by the same means; and when correspondence is returned by way of the chute it is shoved through the slide door into the filing room. It is said that errand service in this eleven-story building is reduced to the equivalent of one person on a twenty-minute route every hour. Other floor and between-floor arrangements have been planned with the same purposes in mind, i.e., of saving both time and space.

Charting the Course of an Order

After an analysis of functions and duties has been made, it is a simple matter to draw up a floor plan of the office on which the course of an order from desk to desk and from department to department is traced. The purpose of such a chart is to visualize, as it were, the flow of work which largely centers around the course of an order. With the defects of the existing system thus clearly shown, a new floor plan can be drawn up with departments, and desks within departments, laid out so far as possible in line with the flow of work.

The office manager of one concern, after making an analytical survey, drew a plan of the office on a large piece of cardboard, using colored tacks to indicate the various departments, strings of different colors to represent the walls, partitions, and railings, and small pieces of cardboard cut to scale to show the position of desks and equipment. (See Figure 15.)

An analysis of the movement of work showed that after the mail was opened and sorted, orders were first sent the length of the office to the sales manager's private room for his inspection. After this they returned over half the length of their journey to the sales record clerk for the purpose of entry on the sales record book. Then, if one of the partners happened to arrive in the office before the entry was completed, they again covered half the length of the room for his inspection. After returning for the entry to be completed, they were switched to the advertising department to be checked up against inquiries. A trip to the correspondence section of the office followed where they were acknowledged, after which came the regular routine of credit inspection, order filling, and so on to the billing and shipping of the goods.

The dotted lines in the chart show the zig-zag course of an order under this arrangement. By analyzing the operations and shifting the cardboards representing the desks, a new

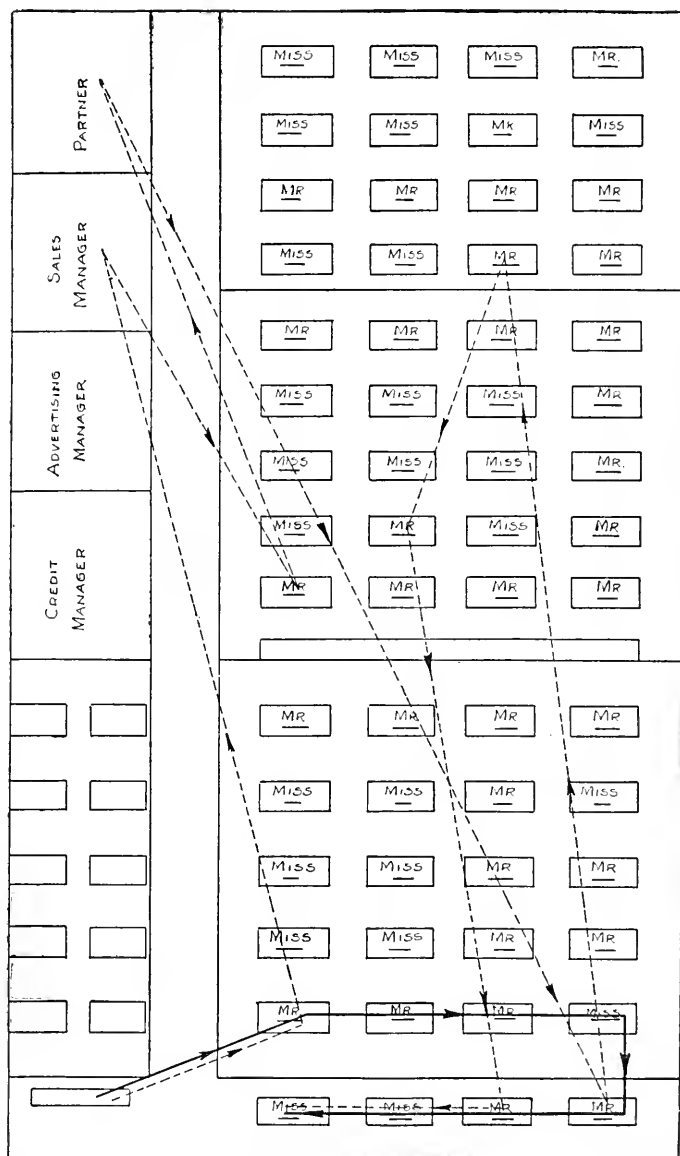


Figure 15. Charting the Course of an Order

The dotted line shows the original course of an order: mailing desk, sorting desk, sales manager, sales record, partner, entry clerk, advertising clerk, acknowledgment, credit, order clerk, billing. The solid black line shows the course of an order after reorganization: mailing clerk, record and number clerk, abstract clerk, order clerk, billing clerk. In the latter case only orders from new customers and orders designated as needing credit verification by the record clerk are routed to the credit man's desk.

layout was drawn up which eliminated the defects and loss of time due to the wanderings of an order to and fro throughout the department. Furthermore, as an obvious means of getting down as soon as possible to the chief business of the day, multiple copies were made out for the use of the credit, advertising, and correspondence departments and for the inspection of executives interested in the orders. Under the new arrangement, the desks at which the recording, abstracting, numbering, and billing were carried out were brought close to the mailing desk—as illustrated by the heavy black line on the floor plan. The new procedure appreciably cut the time required to get out the orders.

Scheduling the Order Work

In general the time needed to perform the work connected with a specific order, depends as much upon the lapses of time occurring between the various steps into which the work is subdivided, as upon the actual working time. The elimination of an operation or its transference to another department may mean a saving not only in time but in transportation as well.

Furthermore, a rearrangement of the operations may eliminate accumulations of work at some desks. If some operations require more time than others, care should be taken in selecting their positions in the line of routed work; for the speed with which an order passing through several hands can be routed, depends upon either the operations being of equal length, or, if of unequal length, then the shorter operations preceding the longer ones. A careful analysis of the work generally reveals how the various operations can be divided or combined so that each subdivision or unit will consume about the same amount of time. How the adjustments based on such an analysis are to be made is illustrated in the following section.

Division of Work Into Equal Operations

The work on one order passing through a certain department required seven operations performed in the following time and sequence:

1st operation.....	3	minutes
2nd " 	1 1/2	"
3rd " 	1 1/2	"
4th " 	6	"
5th " 	3	"
6th " 	3	"
7th " 	7	"
<hr/>		
Total time	25	"

Theoretically the time needed to perform the complete work should have been 25 minutes, but a study of the actual office practice showed that some of the shorter operations tended to slow down unconsciously as they waited for the longer operations to be finished. The routing permitted a loss of 1 1/2 minutes of the worker's time on operations 2 and 3, as in neither case could clerks work faster than the material was supplied to them by operation 1. Likewise 3 minutes were lost at each of the stations 5 and 6 owing to the stoppage of the flow at operation 4. At best the operation on 7 always left work undone at the end of the day or required overtime work. Three minutes lost at operations 2 and 3 and 6 minutes at operations 5 and 6 brought the actual time up to 34 minutes.

These two conditions were remedied or much improved by adding operators to the slow work and by changing the sequence of operations. A study of the case revealed the fact that number 4 was an inspection operation, which in no way affected 5 and 6 and could be performed just as well when placed after them. Also operations 2 and 3 could be com-

bined with no less efficiency since each simply checked certain items on the order, while 7 was divided into two operations and the operators released from 3 put in charge of one-half of it. By making these changes the sequence of operations worked out as follows:

1st operation.....	3	minutes	
2nd “ 	3	“	(combined 2 and 3)
3rd “ 	3	“	(old 5)
4th “ 	3	“	(old 6)
5th “ double force.	6	“	(old 4)
6th “ 	$3\frac{1}{2}$	“	($\frac{1}{2}$ old 7)
7th “ 	$3\frac{1}{2}$	“	($\frac{1}{2}$ old 7)

This arrangement eliminated all lost time due to unbalanced production and is typical of the method usually adopted. In most cases a close study will reveal faults in routing which when corrected will put certain rapidly performed operations together and certain slow ones into groups by themselves. This may be the only way the problem can be solved.

CHAPTER VIII

LABOR-SAVING DEVICES IN THE OFFICE

Applying the Principle of Division of Labor

In recent years the application of the principle of division of labor has brought about a great improvement in the productive capacity of the office force. In the development of industry it was natural that specialization should first be reached in the manufacture of goods. Then, as large surpluses of stocks accumulated, the processes of production began to clog because the power to direct and organize the marketing of goods had not kept pace with the ability to make them. Business men sought a remedy in adapting the same principles of the division of labor to the innumerable office activities involved in sales, credits, purchasing, and other administrative functions of the business. This adaptation has had as marked an effect on the business office as in the factory, and the result as seen in the organization and management of the modern office affords an equally striking example of the efficient management of diverse activities.

Three important developments of this division of labor as applied to the modern office are:

1. The increased dexterity or skill of the individual operators who have become specialists.
2. The saving of time which would otherwise be lost in changing from one occupation to another.
3. The invention of innumerable office devices and machines which not only cut down the amount of labor but enable one person to do the work of many.

Of these three factors, all fundamental, the first two will be considered later on. At present the part which equipment plays in a properly planned and maintained office will be discussed.

Automatic Office Work

Much of the routine work of the office employee resembles in one respect that of the factory. The tasks of both frequently entail reproductions of copies from a model. Work of this kind can be done equally well by machines at a great saving in labor and cost. In the textile mill the Jacquard loom reels off harmonies of woven patterns with no more effort or attention on the part of the employee than a school girl may give to an electric piano player—and all on the same principle. In the office the automatic principle has recently been applied to copy work by the typewriter. By its means an “original copy” may be sent out to every person on a list of several hundred names. These letters are individually written on an ordinary typewriter, electrically operated. Although the main body of the letter is the same, provision is made for the insertion of names, prices, date, or whole paragraphs of interest only to the actual recipient.

A sales manager who sends daily letters to the men in the field is thus enabled to dictate a letter covering some general policy or item of common interest, and yet at the same time insert such personal references as may be necessary, into letters to certain salesmen. The stenographer who takes the original letter needs only to indicate the special insertions under the names of the men to receive them. When the stencil (a paper reel very similar in appearance to the kind used in a piano player) is cut, a similar economical method is followed. In operation one girl can easily run three automatic machines and do the work of ten average typists.

Specialization in the Use of Machinery

With the introduction of the machine method into the office many of the old standards of procedure have been eliminated. Handwriting has been superseded by the typewriter and dictaphone. The messenger boy has been outdistanced by the telephone and telautograph. The mathematical prodigies have been displaced by adding machines. Even old standard processes, like bookkeeping, are being revised fundamentally. For over 500 years bookkeepers followed time-worn methods. Their work was one continuous series of postings, checkings, and recheckings, "the trial balance" always looming up as a nightmare at the end of every month. Now comes the bookkeeping machine which eliminates the burden of the trial balance, relieves the bookkeeper of ledger posting, and puts all previous aids and devices for preventing errors and proving footings into a class of mere makeshifts.

New Devices as an Aid to Efficiency

An office may fall far behind a competitor by not watching for new uses to which a well-established appliance may be put, as well as by delaying too long the introduction of entirely new devices. The portable typewriter has added much to the effectiveness and value of the reports of salesmen and other field men. "We find," says Charles B. Moore, Vice-President of the Oxnard Railroad Service Company, "that reports written by our 18 men using portable typewriters are superior to hand-written reports, since they not only save the time of the traveling experts who write them but the time of the home office where they are studied, filed, and referred to. Carbon copies provided by the typewriter are kept by the men for personal use and are available if the other reports are lost."

Another case, typical of the adaptation of mechanical means to the speeding up of clerical work, is the experience of the

Toledo Machine and Tool Company, which substituted the addressograph for the common practice of copying by hand all the names, amounts, dates, and clock numbers onto pay sheets. The new mechanical method enabled the firm to change from a two weeks' pay-day period to a weekly basis with a saving in time and accuracy, since the machine proved to be ten times as fast as the hand or typewritten method.

Specialization in the Use of Accessories

How closely a manager of a department must study the technique of his departmental activities is indicated by the growth of highly specialized accessories in almost every line.

When carbon paper took the place of copy clerks the salaries of a whole class of employees were saved. Further saving may still be made by a selection of the grade or quality best suited to some particular operation. There is a pencil carbon paper, for example, as well as a typewriter carbon paper and, moreover, a different kind is required according to the number of copies desired. Where only one copy at a time is needed, the paper is made from very durable material and the coating is so prepared that it will not come off easily and single copy sheets can be used 50 to 75 times. On the other hand, if 20 copies are wanted the best results come from using thin sheets coated with carbon that comes off freely. How closely the adjustment of material to the various needs has been studied is shown in the case of one manufacturer who makes 350 different types and weights of carbon paper. This is typical of all office appliances and accessories.

Effect of Specialization on Office Manager and Manufacturer

The rapid development of refinements in specialization keeps the progressive office manager continually on the alert to the value of a new device. Managers who are at first satisfied with a simple adding machine soon find it advisable to put

in non-listers for multiplication work, calculators where division is needed, visible and portable typewriters where machines of this kind increase efficiency, and so on. The manufacturers of office supplies, moreover, by constructive methods of selling and advertising, force conservative managers and reluctant employees to select their equipment with minute care, and to try out new methods and new devices.

Recently bond paper houses have tried to teach their customers how to select the best paper for a particular purpose. One maker carries a stock of over 180 different sizes of bond papers so that any size can be procured without waste in cutting or waiting to have it made. Makers of office furniture publish books of great practical value on filing methods, cost systems, storage plans, and the like; others keep a staff of experts ready to investigate and suggest remedies for poor office arrangement and inefficient equipment.

The makers of a well-known fountain pen recently reported, after an extensive investigation on the comparative saving in fountain pens over pencils in bookkeeping and in stenography, that "assuming 5 cents is paid for a pencil, one stenographer in a year would use up 55 pencils, or \$2.75 per year. Each sharpening uses approximately $3/16$ of an inch of lead; the actual time for sharpening is at least half a minute. Therefore, to sharpen pencils and use them up to their maximum, would require 825 minutes, or $13\frac{3}{4}$ hours. Figuring the wage at 25 cents an hour, the cost per year would be \$3.44." Add to this the cost of the pencils and it makes a total well worth the consideration of the management.

Simplicity and Ease of Operation

The mere use of machine substitutes for mental processes does not in itself insure that the results obtained will be accurate. A good deal depends upon the simplicity and ease of operation of the machine as well as upon the operator selected.

The keyboard of an adding machine, for example, that can be operated by the touch method, not only enables the operator to attain great speed because no time is lost in turning from the copy to the machine and then back again to hunt for the next figure, but makes for greater accuracy as well. The simple keyboard provides the conditions necessary for proficiency based on an easily formed habit. R. H. Tennant, Chief Accountant of the H. H. Franklin Manufacturing Company of Syracuse, claims that such a keyboard increased the efficiency of his department some 25 to 30 per cent.

Far-Reaching Effect of New Methods

Often the effect of an improved method does not end with the single operation involved. The gain produced in one department may be reflected throughout the whole organization by relieving the stress at some strategic point in the office system. Cost reports which are incomplete or incorrect may impede the work of a whole organization by retarding important decisions involving broad business policies. The Barney and Berry Company of Springfield, Mass., found that the efficiency of the entire organization increased after it substituted the mechanical process of cost computation for the mental method. The feeling of security which the new method inspired, because of the timeliness, accuracy, and completeness of the reports, aided the executives in making quick decisions pertaining to buying and selling policies. "Besides," says H. C. Hyde, the Assistant Treasurer of the company, "all this work and much more, including the figuring of the pay-roll and all invoices—work that kept four clerks busy—is done by two girls, with a saving of \$1,200 a year."

The Scope of Duplicating Devices

Perhaps there is no place in the office organization where improvements have been more prolific than in the mailing and

correspondence departments. The demands and needs of big selling and advertising campaigns have been responsible for many of the new accessories. When business men found it necessary to reach and to keep in touch with tens of thousands of prospective and regular customers instead of a few hundred, they began to develop the means whereby letters, circular matter, and the like could be produced on a large scale instead of individually. Hence the modern duplicating devices.

There are many ways by which letters and other forms of communication may be duplicated, but all of them are based on one of four principles, viz.: the printing principle by means of the multigraph; the impression by means of the typewriter with carbon copies; the ordinary stencil and the mimeograph; and the photographic principle by means of the photostat.

Considerations in Selection of Duplicating Method

If the selection of a duplicating method depended only on a comparison of the cost of machines, or the quantity of work to be turned out, an office manager might need no more guidance than that afforded by a price list and a "demonstration." But in making the selection there are many indirect effects to be considered, hence decisions should not be made until the true function of the machine in the scheme of office organization is thoroughly uncovered. The announcement, for example, of a meeting to 10,000 stockholders may well be printed. Such a notice is recognized as being of a general nature, purely impersonal and designed to convey information in the most readable form. On the other hand, a letter that is to go to a hundred salesmen might fail to get the required response to the manager's appeal for more orders if "cold type" were used in conveying the message. A salesman's letter is personal, the information, while of a more or less

general nature, must often be given a particular application. Even carbon copies, or copies of any sort, often fail to get the desired action from the salesmen receiving them. The utility of a duplicating machine is not settled, therefore, until the effect of its output has been thoroughly examined.

Even in cases where duplicate copies are needed only for records, the office manager must bring into play his judgment of values, depending upon the comparative advantages of the "short run" as against the "long run." Records that are constantly referred to must stand the wear and tear of use. Carbon copies that smear or rub off easily may not be an economical or even a safe method of providing important records. Constant recopying may nullify the low first cost of production, and open up many chances for errors to creep into the work.

Rapidity of Production

Tied in closely with all other considerations is the demand for rapidity of production. Stencil machines, for instance, while admirable for some purposes are surpassed by other machines in speed and variety of work done. "Before adopting the duplicator method," says George Taylor of the Locomobile Company, Bridgeport, "we used carbon copies and stencils; but we needed something faster. Price changes coming into the office in the morning must be on their way by that evening's mail to the branches, if losses due to undercharging for certain parts are to be avoided. It takes only a minute to run off a hundred copies, and as only one checking against the master copy is needed, a perfect register is obtained in every instance. Thus the modern duplicators do the work of nine persons, saving the company \$5,400 a year in salaries." The modern duplicator has become a very flexible office accessory. One firm runs off a 100-page booklet, another prints its monthly bulletins, and a third produces an interior house

organ, printed in three colors, by means of this duplicating device.

The Speed and Accuracy of the Photostat

Whatever may be the advantages of duplicators dependent upon type, transfer paper, or the stencil, none of these devices can compare with photographic copying when speed and accuracy are the chief essentials. Long and complicated contracts, which may have taken days or even months to perfect, can be copied with absolute accuracy in a few minutes by means of the photostat. The Commonwealth Edison Company of Chicago cites, as an example of the time- and cost-saving feature of this appliance, that a contract of six sheets was photographed, developed, washed, dried in an electric drier, and made ready for distribution in 20 minutes. Stenographic copies would have taken hours to make. Moreover, as each stenographic copy required the original signature of seven executives, the additional time spent in bringing each copy before these men was also saved. Either the contracts or the executives would have waited.

All large insurance companies use the photographic method of copying their policies and one company uses the photostat for making copies of important records which are too valuable to be trusted out of the record department even for clerical purposes. Two photostat rooms are maintained. One room is adjacent to the policy division, where a copy of each application (as required by law) is photographically made and attached to the policy. Two cameras here turn out reproductions of 200 applications in less than 90 minutes. Prints are produced directly on sensitized paper fed from 350-foot rolls. In the course of a year 24 miles of this paper are used for this purpose.

The other room is in the "History Card Section," conveniently located for making photographic copies of the cards

which contain the complete record of each policy. Four machines are employed, each capable of making 500 reproductions a day. Therefore, when some department wishes the record of John Jones, and the information cannot be given over the phone, a photographic copy is made of the history card and sent to the department. The photographs each day number about 1,000. In the same way copies are made of other important papers desired by the various departments of the office. Thus, as in the case of other office appliances, the photostat can be used for many special purposes. To refer to the Commonwealth Edison Company again: "We copy the music for our orchestra, statistical sheets that would take days to recheck, material for our detective bureau, blue-prints, etc., with a speed ten times that of typing."

The Field of Calculating Machines

Accounting is a highly specialized form of statistics and many types of machines have been devised to perform mathematical calculations and thus meet the needs of the accountant. As adding, dividing, subtracting, and multiplying constitute a large part of most accounting work, it is not strange that computing machines were first used in the accountant's office; and that slide rules and other calculating devices are every day being increasingly employed in handling the work of the cost and estimating departments of large companies. Under modern conditions of competition, cost statistics, to be valuable, must often be available on short notice. A company dealing in pig iron, lumber, or chemicals, for instance, must secure the unit cost per ton, foot, or gallon, of the various products and this frequently involves calculations carried out to eight or nine decimal points. Without the aid of these calculating devices, the frequent analysis of the cost of such products would be almost prohibitive because of the expense and time involved.

Bookkeeping Machines

Bookkeeping, although the forerunner of all other forms of clerical work, has been the last to be affected by mechanical aids, so far as concerns the actual entry of data upon the books and other records. The modern bookkeeping machine, which is a combination of the typewriter and the adding machine, is a comparatively old invention as office devices go. Though its progress is slow, it is steadily displacing the old-time bookkeeper for the reason that a competent girl operator can do the work of three bookkeepers with greater speed and accuracy. This statement is borne out by the experience of many large office organizations.

"All the bookkeeping of this company," says M. R. Bell, Recorder of the Warner Sugar Refining Company, New York, "and that of the community of interests, doing a business of \$40,000,000 to \$50,000,000 a year, is done by three girls and three bookkeeping machines. They post a thousand accounts a day, when necessary, write out brokerage statements, and write up all outgoing checks. In one operation we enter up the cash book and post to the ledger. At three o'clock, when our deposits to the bank are made, we could if we desired actually close our books. With the aid of the six adders on the three machines the work is always in balance and one operator takes the place of three men."

Tabulating Machines

The use of tabulating machines, by means of which any desired data are recorded on cards, is becoming today more and more common. Many companies now employ these machines for the keeping of their sales ledger and the similar records, including sales by dealers, by salesmen, by territories, by brands, and by factories. In applying the principles of mechanics to the sorting of records into such classifications as are demanded by the needs of any business, the Hollerith

and similar machines have become almost indispensable in large offices.

The influence of the Hollerith machines has been such as almost to revolutionize the work of the United States Census Bureau. This device consists of three parts and may be used to make a wide range of records, sorting and counting them and adding the amounts entered thereon in a remarkably short time. The equipment comprises: (1) a key punch or perforating machine, (2) a sorting machine which is governed in its operation by the perforations, and (3) a tabulating machine.

The scope of the machine may be best judged by listing the purposes for which it is used in the actuary's department of a large insurance company. The device is used:

1. To keep account of the new business done and the policies changed and terminated.
2. To classify and total the outstanding business in its proper groups.
3. To classify and analyze the foreign business.
4. To classify the data as to mortality experience.
5. To analyze receipts and disbursements by states.
6. To control the policy loan record.

A first-class operator can prepare with a key punch from 300 to 400 cards an hour, depending upon the amount of information to be shown by the perforations. The sorting machine will sort the same number of cards a minute. The tabulating machine adds them at the rate of 170 a minute, and counts them while the adding process is going on.

Storage and Filing Devices

The age of steel has finally penetrated to the office. "Imagine risking a railroad's right-of-way in pasteboard boxes!" says the Art Metal Construction Company in one of its adver-

tisements. Most concerns are beginning to recognize good storage facilities as one of the best forms of insurance. Hundreds of cases might be cited where steel files, desks, safes, and other steel equipment have saved invaluable papers and records. Modern methods of finishing steel office furniture overcome the earlier objection to it on the ground of appearance. It can be made to harmonize with the surroundings in color and tone. Appearance, however, is the least of several important considerations to be taken into account in the selection of this type of office equipment. Two of these are the space occupied and ease of operation. Floor space, in metropolitan districts, rents at from \$2.50 to \$3.50 per square foot. The space problem sometimes taxes the ingenuity of the office manager to the utmost. The use of a safe or a system of files that saves 20 per cent of the space generally used for the purpose makes an appreciable saving.

One manager, by installing a new vault interior, saved one-half its former space; another, by modeling a new vertical card file, saved floor space that was much needed in the cashier's department. Instead of spreading the filing cases over the floor, he devised a movable card file by which the space above the floor might be utilized. The operator, in a few seconds and by simply pressing a button, can bring within reach any one of the 23,000 cards arranged in 16 boxes.

Handling Equipment

A saving may also be effected by reducing the labor of handling equipment. One firm says that the difference in the pull of the same load in opening filing drawers may vary from 3½ ounces in one type to 10 pounds in another. Since few office managers have investigated the losses due to useless motions, few realize the cumulative effect of this wasted effort. By actual count one manager determined that the employees opened and shut the drawers of six filing cab-

inets 500 times during the day. Assuming a saving of 156 ounces on each pull (the difference between $3\frac{1}{2}$ ounces and 10 pounds) this represents a daily saving of 4,874 pounds or $2\frac{1}{2}$ tons of extra labor lifted from the shoulders of the office workers. The M. A. Hanna Company, of Cleveland, claims that a change of systems in its file room work (embracing the use of 57 file drawers, with about 100 calls for correspondence and some 500 letters to file a day) now enables two girls to handle the work with ease.

Modifications of old ideas are the sources of most improvements. Storage places and safes were once thought of only as stationary devices built into the wall, or the like. The modern vault into which books and other valuable records can be wheeled on specially designed trucks, replaces the old-time inaccessible safe. A company employing 50 bookkeepers and keeping its heavy loose-leaf books in a vault, found that it lost valuable time and energy in unnecessary carrying. By using a "vault truck" it estimated that it saved 10 per cent of its bookkeepers' time. The same idea of economy can be followed into the storage of old records. Every business uses a large number of "transfer cases" during its business life. Old records are valuable, and should be stored in accessible places. In choosing transfer cases they should be:

1. Easy to handle, i.e., of rigid construction with drawers on rollers.
2. Durable.
3. Have large capacity, say 5,000 letters to a case (to obviate the necessity of buying a large number).
4. Flexible in arrangement, so as to take up little space.
5. Proof against vermin, dust, fire, and water.

Stressing Utility, Rather Than the Device

It is unnecessary to describe in detail the special features of every modern office device. The point of the illustrations

given is that as much of the office routine consists of virtually the same kind of work repeated at regular intervals, much of the work can be handled mechanically with almost the reliability and dispatch of a machine process and with the same notable economy. The factory manager who employs human labor to do that which can be done at much less cost and more efficiently by a machine, is neglecting one of the most important means of increasing his profit even if he still sells his product at a profit. The same is applicable to the office manager.

CHAPTER IX

THE DESK AND THE DISPATCH OF WORK

The Modern Efficiency Desk

The change in office equipment that has come about in the last few years is indicated by the care and study which the Equitable Assurance Company gave to the replacing of its desks when the burning of their old building made it necessary to purchase new equipment.

The desk finally selected for the use of employees engaged in routine duties is little more than a table with three shallow drawers as illustrated in Figure 16. The center drawer holds the employee's tools and the side drawers his stationery. The advantages of a desk of this simple type are that clerks cannot stow within it papers which will later be overlooked. As there is no room for placing current work in the drawers, any tendency to defer until tomorrow what can be done today is nipped in the bud. The simplicity of this equipment reflects

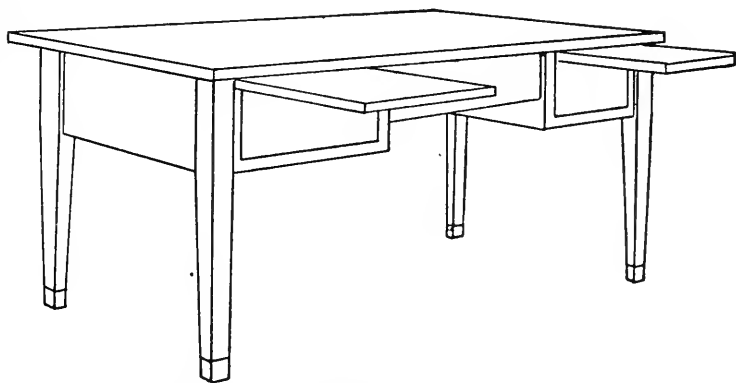


Figure 16. The Modern Efficiency Desk

This desk is little more than a table with three shallow drawers. This construction makes it impossible for clerks to stow away and so overlook papers.

the celerity with which business is conducted today. The desk is no longer a storage place—nor even ornamental—but a tool for making the quickest possible turnover of business papers.

The roll-top desk still lingers in many offices, the reason for retaining it being the desire of executives and employees to protect uncompleted work left upon the desk top or in its drawers. The chief fortress of its defence today is in the sales office, the reason being that as salesmen are frequently called away from their desks upon business, they find it convenient to close down the roll top with the assurance that any unfinished work will be undisturbed until they return. This practice, however, encourages disorder and lack of neatness and for this reason the modern flat-top type of desk is preferred in most businesses for the use of both executives and employees.

A desk in an executive's office is a center of consultation and conference—where orders and instructions are issued. Accordingly, it should provide the aids necessary for expediting the executive function. On the other hand, a clerk's duties are to carry out orders and to get the work done. His desk should be trained down to fighting trim, supplied with emergency rations, and all camouflage removed.

The Executive's Desk

Since the efficiency of an executive is measured by the rapidity with which all matters coming to him are disposed of, i.e., prompt dispatch, his desk should be free from encumbrances. A type widely used by department-heads and others is a double-pedestal flat-top desk of the standard size of 36 by 60 inches (see Figure 17). If a larger desk is required, this style comes a foot wider also.

While one business man may prefer a standard flat-top desk together with a work table over which interviews may

be held, another may find it desirable to use the double flat-top desk. The latter is a space-saving device, since it furnishes a place where a secretary or assistant, when summoned, may take dictation. In the drawers on the secretary's side may be stored the equipment needed by him in taking dictation or any papers required for reference purposes.

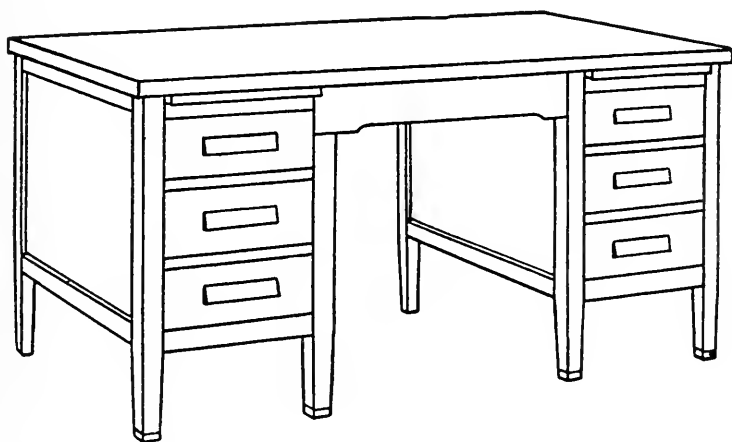


Figure 17. Standard Double-Pedestal Flat-Top Desk

A type of desk widely used by executives, providing free working surface and ample drawer room for necessary storage purposes.

Whatever the form of executive desk adopted, the test of its usefulness is based on its effectiveness as a working tool and not its use as a store house. Progressiveness in business today is marked by the movement of goods on as direct a route as possible from manufacturer to consumer. Pressure is constantly being put upon those parts of the organization that keep business moving. At best, any type of storage system is a passive agent in business, and when the executive's desk takes on this function, it shows that his activities are not in harmony with the methods of modern business.

The General Clerical Desk

The general clerical desk does not differ in style from that of the executive desk. However, its use is very different and the standardization of its contents and their arrangement has a definite bearing upon the efficiency with which the occupant of the desk carries on his work. When a particular place has been selected for a particular article, that place should be used habitually. Any variation from this standard practice means a loss of time. "Something is wrong," says one office manager, "if a clerk, in seven seconds, cannot put his hand on any paper or article needed which is temporarily in his possession."

The work of the bookkeeper is still so dependent upon the use of large size ledgers and other heavy books that the old style bookkeeper's desk with sloping top is still employed. It must enable the bookkeeper to stand before his work and move from side to side while making entries in large books. A rack on which the books may be placed and two or three storage drawers are usually provided for in the standing desk.

The "Tub" Desk

The development of the card ledger and the card record in general, has brought about changes in the structures of the desk. At first, card records were usually stored in the drawers of a filing cabinet and brought to the desk when entries were to be made upon them. To save time in handling the card file, a desk has been devised the top of which serves as an open filing cabinet, while the space required as a writing surface is provided for by a narrow sliding platform or shelf placed above the open filing divisions. This type of desk is known as the upright "tub" desk; a divided desk with a narrow support between the divisions is known as the sitting style of "tub" desk. Both types are illustrated here (Figures 18 and 19).

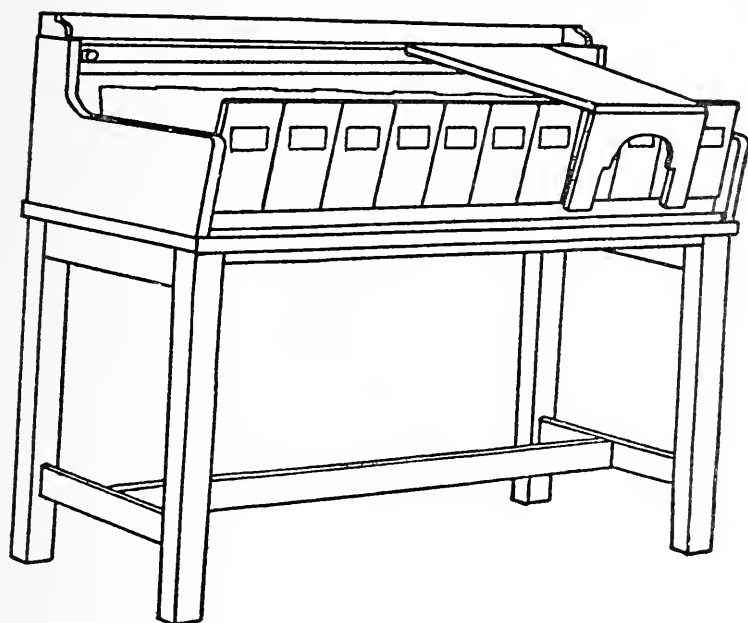


Figure 18. Upright "Tub" Desk

The top of this desk is an open filing cabinet and a narrow sliding platform provides a writing surface.

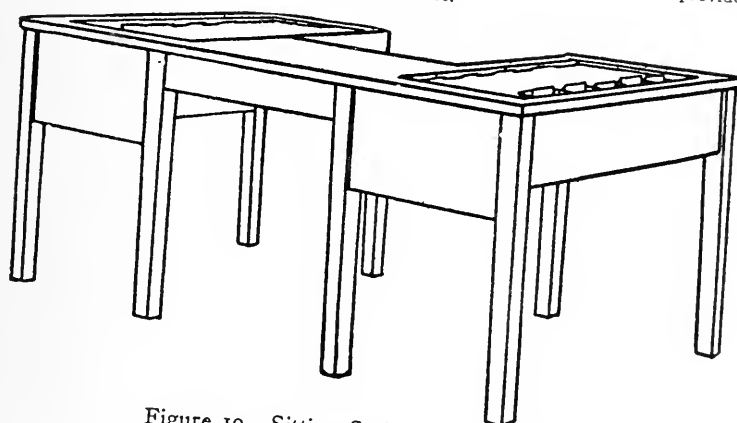


Figure 19. Sitting Style of "Tub" Desk

In this style of desk the clerk sits between the wings and by a slight turn in his chair can easily remove any card from the cabinets.

It will be noted that the upright tub is modeled after the old-style sloping desk. In place of the slanting top a tub of card trays appears. The sliding table or shelf, which is on runners, can be moved from side to side, making it easy to pick out the individual cards, place them on the sliding top, make the entries, and return them immediately to the proper tray. In the second type of tub desk, the clerk sits at the side or between the wings and, with the extension board as a writing support, he can by half-turns in his swivel chair, remove cards from either side of the top trays, make entries, and return them to their proper place.

The use of these desks need not be confined to the book-keeping section, as they are equally well adapted to the requirements of the sales, collection, and other departments in which card records are kept.

Desk for Stenographic Work

While the desk most commonly used for typing purposes is the single- or double-pedestal, drop-top typewriter desk, as illustrated in Figures 20 and 21, the tendency in many stenographic departments is to return to the simple flat-top desk or table, upon which the typewriter is securely fastened. This simplicity is due to the growing specialization of office duties. The work of the typist is not supposed to embrace any clerical activity calling for much desk surface or storage place.

Where the office space is limited, the 32 by 38 single-pedestal, drop-top typewriter desk with three drawers is used. The size of the double-pedestal desk is 35 by 54 inches. This last provides ample space on the top for the letter trays, copyholder, and other accessories, while within its six drawers there is room for the various records. The typewriter, when not in use, is concealed under the lid which fits into the desk top. To bring the machine to the writing position the lid

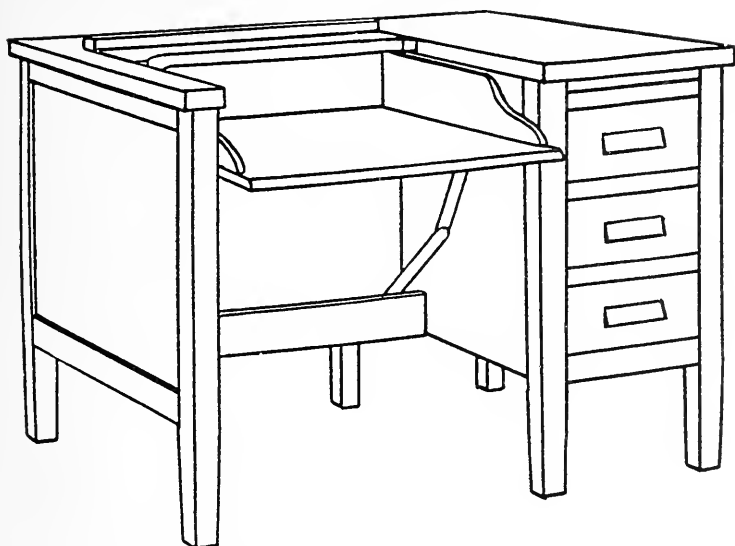


Figure 20. Single-Pedestal Drop-Top Typewriter Desk
This style of desk is used where space is limited.



Figure 21. Double-Pedestal Center-Drop Typewriter Desk
The surface of this desk provides ample room for letter trays and other accessories, while the drawers are large enough for storage of supplies and records.

is raised, which effort also raises the typewriter to the proper height.

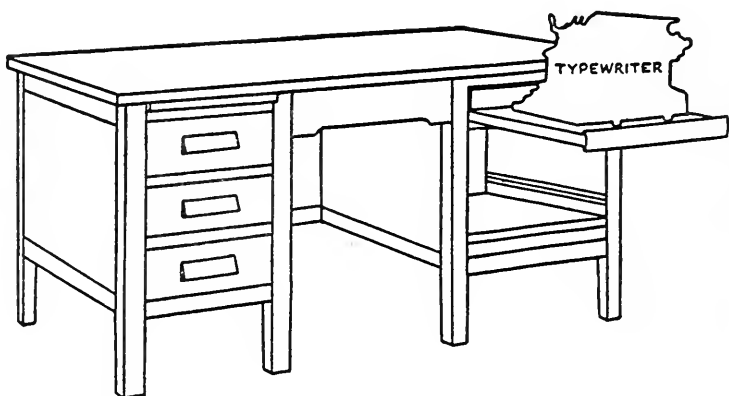


Figure 22. Combination Clerical and Typewriter Desk

This desk is useful for the clerk who has more or less typewriting to do and who also requires a large working surface.

When an employee does both clerical work and typewriting a combination desk is useful. In the style shown in Figure 22 the typewriter when not in use is lowered into a compartment at one side of the desk.

Place of Desk in Executive's Office

A matter which, to some slight extent, affects and reflects an executive's personal efficiency, is the selection and arrangement of his office equipment so as to give him the quickest and easiest service. A study of the layouts in Figure 23, which illustrate the advantages derived from a rearrangement of the office furniture and equipment in a given case, will show the importance attached to these details by some executives.

The reason for the rearrangement as shown may thus be best described by the executive himself: "The table, to get the best light from the window, should be in the center of the room. As this is my working surface, the light should come

over the left shoulder. The desk containing records and other 'decision data' is put against the wall. This makes the desk easily accessible by simply turning around and, in case of an interview, it is easy to collect papers lying on the table and put them on the desk where they cannot be seen.

"Furthermore, the location of my chair enables me at a single glance to see persons coming into the office. A moment's

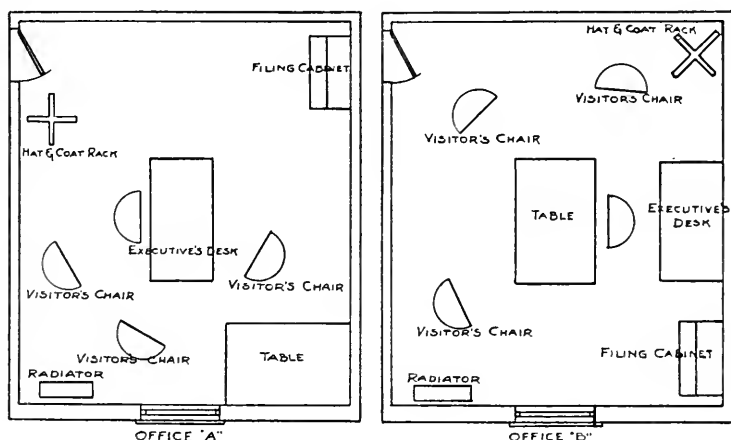


Figure 23. An Executive Office
A. Poorly Arranged. B. Well Arranged.

time is thus allowed for a mental adjustment before greeting them. The positions of the other chairs have been arranged to meet the requirements of three types of visitors, viz., the customer, the employee, and the business caller. In case a salesman calls I motion him to a seat opposite the window. The light by striking him full in the face enables me to read many subtle meanings in his eyes and facial expression which are not revealed by his voice, or his argument. On the other hand, if I am trying to sell a visitor something, the chair near the radiator is selected. The visitor is permitted to look into my face which is in the full light and hence I add to

my other powers of persuasion, the influence of my facial expression. There is one chair to the right, that always welcomes the employee. As a rule, no employee is denied a conference because someone else is present. A word of apology to a visitor enables me to turn to the employee. A few moments' conversation will generally settle a question and avoid loss of working time.

"The location of the hat-and-coat rack and the filing cabinets in their new positions, offers increased convenience over the old locations. The hat rack no longer invites the casual visitor to prolong his stay, and a count of the number of trips made each day to the filing cabinet shows the time saved by having the records within reach continually."

The above illustrates the close relationship of the desk to the rest of the office. By using the filing cabinet as a convenient storing place, the executive confines the use of his desk to the dispatch of business and not to the accumulation of business papers and records. Accordingly the drawers in the desk are usually empty, while the top of the desk holds only the receiving and dispatching trays, for correspondence and other papers, a telephone, a tickler file, and a glass desk-pad which protects schedules or data constantly referred to.

If the executive's work is moving rapidly and without lost motion, very little evidence of activity, such as piles of correspondence and other papers, is seen. The appearance of his desk should never indicate pressure or complication of the day's work.

Index File and Memorandum Tickler

The executive who is pushing the business and not letting the business push him must be continually on the alert to details that require his attention and for ideas and suggestions that are worth nailing down for later use. He cannot trust his memory to hold intact every symptomatic detail, nor can he

hope to recall every good idea that suggests itself at unexpected moments, or remember all future engagements. Hence he should provide himself with some means whereby memoranda of events and ideas can be systematically written down and then relegated from the mind until needed. Two useful aids in this respect are the "idea file" and the "memoranda tickler." The first of these displaces the old scrap book which collected a varied assortment of ideas, but in such a "hit or miss" fashion that it proved little better than the original system which depended upon a vague feeling of the executive that he had read some article somewhere at some time. The idea file consists of a vertical file of envelopes in which ideas and suggestions are collected and classified under subject heads pertinent to the business. The memoranda tickler consists of a desk file the guide cards of which bear the dates of one or more months. Little time is required to jot down an idea, a conference date, or other event needing attention in the future. By simply putting a slip behind the "date guide" which shows the time the matter must be taken up, the executive has an infallible assistant—one that never forgets.

File for the Executive

The executive's office needs little other equipment than the desk with its accessories and, for his personal use in filing correspondence, a single unit vertical file, fitted with guides lettered alphabetically. If, as is frequently the case, other material needs to be stored away, such as catalogues, circulars, trade papers, and the like, these may be put in bookcases or shelves properly labeled.

Planning and Dispatching the Day's Work

Routing and scheduling the daily work enables the executive to bring only such matters to his desk as need his attention at a particular time. When the work is finished it is

removed. The following three schedules illustrate practical methods of keeping the flow of work moving; the methods have been devised to suit the needs of particular cases. The day's work of the average business man may be roughly divided into: (1) routine duties; (2) appointments; (3) interruptions. Only by planning ahead and allotting a definite amount of time to each important matter can the busy man clear up all work requiring his attention day by day. Appointments should not be permitted to overlap the time required for routine duties nor should interruptions be allowed to interfere with either. One manager's schedule is as follows:

8.30 to	9—	Read mail
9	"	10—Dictation
10	"	11—Conferences—sales
11	"	12—Conferences—factory
12	"	1—Luncheon and appointments
1	"	2—Minor correspondence
2	"	3—Conferences—employees
3	"	4—Planning
4	"	5—Factory inspection

As above activities rarely if ever require the time allotted to them, and under ordinary circumstances most of them can be disposed of in a few minutes, plenty of time is left over to take care of interruptions and unforeseen duties. But by adhering rigidly to the schedule these are never allowed to interfere with the work which has to be done.

Another executive, W. H. Ingersoll, marks out the "five important things to do today" and adjusts his appointments and other duties accordingly, on the following chart.

Planning a Big Sales Campaign

The merchandise manager of a large department store provides for pressure of work and special activities by means

Date _____		
PROGRAM OF THE DAY		
DUTIES		APPOINTMENTS
	9	
	.15	
	.30	
	.45	
	10	
	.15	
	.30	
	.45	
	11	
	.15	
	.30	
	.45	
	12	
	.15	
	.30	
	.45	
	1	
	.15	
	.30	
	.45	
	2	
	.15	
	.30	
	.45	
	3	
	.15	
	.30	
	.45	
	4	
	.15	
	.30	
	.45	
	5	
	.15	
	.30	
EVENING:		

Daily Program of Work

of a special schedule. This always gets the right of way over routine duties but is made to fit into the regular work as closely as possible. A clearance sale, for example, is planned to begin on February 1. At least three weeks will be needed to make adequate preparation for it. The manager's part consists largely in keeping tab on the work through the sales conferences. Therefore, meetings are held at regular intervals, at which the sales plans take precedence over all other subjects for consideration.

The schedule as planned took the following form:

WORK ITEMS	OBJECT TO BE ATTAINED
January 11	
Executive Meeting: Manager Assistant Manager Superintendent Merchandise Manager Assistant Merchandise Manager Advertising Manager Display Manager, etc.	Decide: 1. Name of sale 2. Duration of sale 3. Method of stimulating interest: (a) Among clerks—prize contest, for most sales, and for starting most customers' transfers (b) Among customers—portion of day's proceeds to charity 4. General staff meeting—when, how many, etc.
January 12	
Meeting: Manager Assistant Manager Superintendent	Decide: 1. Extra help needed 2. Supper money Discuss: 1. Selling Facilities
January 13	
Conference: Manager Merchandise Manager	Decide: 1. Date first buyers' meeting 2. Shall assistant buyers be present at discussion of sales methods?
January 14	
First Buyers' Meeting (Short): Merchandise Manager Buyers Department Managers	Announce: 1. Date and duration of sale 2. Departments to participate 3. Suggestions from department managers invited

WORK ITEMS	OBJECT TO BE ATTAINED
January 15	
Meeting: Merchandise Manager Superintendent Advertising Manager Display Manager	Decide: 1. Sign display (a) Store front (b) Elevators (c) Pillars or post (d) Ads. on restaurant menus
January 17	
Conference: Manager Merchandise Manager	Decide: 1. Advertising of proposition 2. Approximate sales 3. Limit "mark-downs"
January 18	
Conference: Merchandise Manager Advertising Manager	Decide: 1. Advertising media (a) Circulars (b) Circular letters (c) Announcement cards (d) Bill boards, etc.
January 19	
Conference: Merchandise Manager Display Manager	Decide: 1. Window display (a) Type (b) When to go in (c) Frequency of change (d) Allotment of windows 2. Interior display 3. Allotment of aisle tables

WORK ITEMS	OBJECT TO BE ATTAINED
January 20	
Meeting: Merchandise Manager Advertising Manager Display Manager Card Writer	Decide: 1. Price cards (a) Where put on (b) Size, color, etc. 2. Delivery wagon display 3. Dining room announcements 4. Other announcements
	} By Adv. Mgr.
January 21	
Conference: Merchandise Manager Superintendent	Decide: 1. Method of marking merchandise (a) Leave old price tag (b) Price in red or blue (c) Entire stock "marked through" (d) Just enough for the sale
January 22	
Conference: Merchandise Manager Advertising Manager	Decide: 1. Comparative price—method in advertising and on price cards.
January 24	
Buyers' Meeting	Announce: 1. Plans of sale and extent of advertising and display.
January 25	
Staff Meeting	1. Don't tire by long-winded and high-brow talks. 2. Few minutes long.

WORK ITEMS	OBJECT TO BE ATTAINED
January 26-29	
Work being rounded up by all Managers	<ol style="list-style-type: none">1. Superintendent—arranging for extra help.2. Advertising Manager—working on first proof and copy for follow-up.3. Display Manager—executing displays.4. Card Writer—working on show cards and price tickets.5. Merchandise Manager—busy with department heads; planning handling of goods.6. Assistant Manager—caring for routine work for General Manager.
January 30	
Final preparation	<ol style="list-style-type: none">1. General Manager—see proofs, cards, superintendent, list extra help2. Merchandise Manager:<ol style="list-style-type: none">(a) See all mark-down sheets are in.(b) Check card-order sheets of the card writers.(c) See all merchandise tables are ready.(d) See all cards are prepared.(e) Inspect windows and interior displays.3. Superintendent:<ol style="list-style-type: none">(a) Check over department lists of extra help needed.

WORK ITEMS	OBJECT TO BE ATTAINED
January 30 (<i>continued</i>)	
Final preparation (<i>continued</i>)	<ol style="list-style-type: none"> 3. Superintendent (<i>continued</i>). <ol style="list-style-type: none"> (b) Check over plans with display manager. (c) Inspect finished displays. (d) Inspect signs in windows and on wagons. 4. Advertising Manager: <ol style="list-style-type: none"> (a) See proofs of advertising of opening sale. (b) Impress buyers on importance of good follow-up matter. 5. Display Manager—check windows, price cards and ticket; windows' appearance "sale-like" not "junky."
Final Staff Meeting	<ol style="list-style-type: none"> 1. Closing time on last evening before sale. 2. Short "pep" talks by Manager.
February 1	
Sale starts	

PART III
METHODIZING THE MEANS OF
COMMUNICATION



CHAPTER X

HANDLING THE OFFICE MAIL

Importance of Mail Department

The mail department is the first point of contact between outside customers and the inside office force. As such it may be said to be only an extension of the postal system. It receives the mail and distributes it throughout the office, or it collects the letters and delivers them to the postal authorities. To be effective, therefore, the inside postal system should be keyed up to the same requirements of schedule that exist in the national system.

The efficiency of the mail department is, perhaps, no bad criterion of the efficiency which exists in any business organization as a whole. Nothing is of more importance to a business man than the rapid conveyance of information. This applies to his outside connections as well as to his departmental relations. From the outside he must have the earliest knowledge of events that may affect his trade. In many cases agents of large concerns are instructed to use the telegraph or telephone even in the minor emergencies which arise during the course of the day's work, such as market changes, business failures, price modifications, and the like. But the great bulk of commercial correspondence is still carried on by mail.

The Dependability of the Mail

It was by no mere accident that the Act of Parliament of 1660, which inaugurated the post office in England, came during the period when she took her first stride toward commercial dominance. The progress of great economic movements is registered in many new institutions and technical

devices, hence the advancement of commerce is marked by the adoption of postal systems and by improvements in methods and devices for conveying information. A London firm that received one letter in the time of Charles II would receive 1,000 today with much greater dispatch and dependableness. But the 2,000 to 4,000 letters in the morning's mail of a great trust company indicates something more than that the present postal system is more dependable than the old post of colonial days. It shows that dependableness in commercial relations has grown throughout the business world and that these 4,000 letters represent not merely a growth in the bulk of commercial correspondence of 399,900 per cent, but a similar increase in commercial confidence—confidence in the postal system, in the promises of men, in the business organization which carries out the details of long-distance transactions.

Functions and Routine of a Mailing Department

The functions of a mailing department are the same whether the office it serves contains one desk or one hundred. Briefly described they are as follows:

1. Opening, sorting, and distributing incoming mail to all departments.
2. Collecting, putting up, sealing, and dispatching outgoing mail from all departments.
3. Maintaining messenger service on a regular schedule throughout the office.

The mail is the lever that starts the office machinery at opening time. Therefore, long before any of the other departments start work, the first shift of clerks in the mailing department should be busy getting the early mail ready. A second shift of clerks should wind up the day's business after the correspondence has been signed by the officers of the vari-

ous departments. The letters are then brought to the mail room where they are enclosed, sealed, and the postage "rated up," until finally, the mail is delivered to the post office and the mailing department which began the day's work now brings it to a close.

Handling the Incoming Mail

The methods employed by a large New York banking corporation illustrate the general procedure in handling a large volume of incoming mail.

Beginning at 5:30 A.M. and continuing until 9 o'clock, when the post office letter carriers bring the first regular mail, the mailing clerks make hourly trips to the Wall Street post office. By 9 o'clock the office mail is sorted and ready for distribution to the department managers who call at the mail room shortly before the office work begins for the day. Thus valuable time is saved, for checks must be ready for the clearing house by 10 o'clock. Seven men of the first shift are kept busy opening and sorting the letters which run from 2,000 to 3,000 on ordinary days and reach as many as 4,000 on Mondays. After the mail has been brought to the office and the personal mail separated from the official letters, the envelopes of the latter are opened by electric machines. To insure against the possibility of overlooking any enclosures the envelopes are slit on three sides and laid open flat.

The sorting of the letters follows and this must be done with great care. A mistake due to carelessness or poor judgment at this point may cause a costly delay. The mailing clerks, therefore, must possess more than ordinary intelligence and be familiar with the activities of all departments. To aid the clerks in putting the mail into the proper channel for attention, they are given a schedule which describes the correspondence that goes to each department and indicates all changes that occur in the character of the work of a depart-

ment. The scheduling of the delivery is still further carried out by defining the route the letters are to travel.

Handling the Outgoing Mail

Just as one hour gained in the mail delivery at the beginning of the day adds to the working time of the whole office force, so any time saved at the close of the day in getting the mail out adds to the effectiveness of the service rendered the customer. The mailing department in the case cited is made responsible for the collection and handling of the thousands of letters which need to be enclosed, stamped, and mailed and for the various other items of mail matter, such as printed matter, publicity literature, letters and packages for registration which must be weighed and the proper postage stamps affixed. As soon as the letters and circulars are enclosed by one set of clerks, others take up the duty of sealing them. Electric sealing machines are provided for this purpose.

Constant attention is given to through mail-train connections. Collection checks are put in envelopes and sent to the post office for dispatch on through trains to cities where the company's correspondent banks are situated, while a special messenger service is provided for getting important letters to the post office.

As a further example of the varied nature of the mailing clerks' duties, this company demands that they solve the many questions that come up in connection with domestic and foreign postage rates. Interesting problems arise in this connection every day and a clerk must know the rates of postage applicable to domestic or foreign points, weights, dimensions, zones, and class of matter involved.

Labor-Saving Devices

More labor-saving devices have been invented for the expeditious handling of mailing matter than perhaps for any

other phase of office activity. These include such things as letter openers, pneumatic mail tubes, envelope sealing, stamping and recording machines, rotary letter copiers, weighing scales, addressing machines, and so on. The place of these devices in the general scheme of handling the mail is indicated by their names and nothing further need be said in this connection than that the use of machines instead of hands enables large economies to be effected in the mailing department.

The Use of Sorting and Assembling Racks

In the sorting of either the incoming or outgoing mail matter, racks may be made to serve a useful purpose. This kind of equipment simplifies the distribution of the incoming mail by providing a place for the correspondence which is put into compartments—one for each classification—where it can be recognized at sight. Most incoming mail has a liberal amount of such matter as freight notices, bills, receipts, agency letters, and the like. This mail can be sorted before going to the correspondent's desk. Several styles of racks are available, but a base-board with as many upright divisions as the classification calls for is all that is required. It is a sort of departmental post office and may stand on the desk before the clerk. There is a separate folder for each department and special folders for mail not coming under the standard classification.

In assembling the outgoing mail all letters intended for one correspondent are grouped together at the close of the day. To this end the rack is provided with compartments for the mail of those firms or individuals with whom correspondence is regularly carried on. In these compartments the outgoing letters from different departments are assembled during the day and mailed under a single cover. Not only does this method insure against any important matter being overlooked when customers ask about several things in the same

letter, but it effects a big saving in postage during the course of a year.

The Elimination of Lost Motion

In handling the work of the mailing department some concerns have gone so far as to analyze the various operations with a view to eliminating unnecessary motions by so arranging the sequence of the operations that useless effort is avoided. In one case, as an example of some of these refinements, the operation of "mail opening" was analyzed as follows:

1. Letters extracted from envelopes.
2. Envelope pinned to its former contents.
3. Money separated from letter and accounted for.
4. Letter rubber stamped and amount of money entered.
5. If no money accompanies letter it is stamped "No Money."

A further analysis of each of these operations showed that operation 4 might be so handled as to save much time. It was necessary on this operation to pick up the rubber stamp, use it, lay it down, pick up the pencil, mark amount, and lay the pencil down. "The average output," says Mr. Leffingwell, the organization expert, "was 80 letters an hour. By omitting the rubber stamping of the letters containing no money at the time of opening, laying them all in a basket, and stamping them at the end of each mail, the output was increased to 250 per hour."

The savings that can thus be made may seem trivial in an isolated case and yet in the aggregate they may be well worth making. Shorter and better methods can frequently be employed without additional cost, but are overlooked because the saving in any individual case seems at first sight to be very small.

Instructions for Folding Letters

That some concerns find it worth while to pay attention to small matters is seen in the Westinghouse Air Brake Company's instructions to mail clerks for folding letters to be placed in "window" envelopes:

1. Fold bottom over to top of salutation; this marks the line where second fold is to be made.
2. Pick up letter, holding firmly with left hand while making fold with right, moving right hand from left to right.
3. Hold letter in the same position with left hand while grasping under edge with the right. Then turn address side down preparatory to placing in envelopes.
4. Envelopes should be placed face downward alongside of pile of letters, with flaps next to letters.

These instructions are accompanied by five simple pen sketches which indicate graphically the position of the hands, the various stages of folding, and the relative position of the letter-heads and the envelopes. Copies of these instructions were run off on the mimeograph and distributed among the mail clerks.

The rule book of another well-known company contains the following instructions regarding the folding of a letter for an ordinary envelope: "In folding a letter for an ordinary envelope do not place the bottom of the sheet even with the top before folding crosswise, but place the bottom of the sheet an eighth or a quarter of an inch below the top, then fold in the usual way."

By folding in this manner the person who opens the letter finds there is room to grasp the top without taking hold of the bottom of the sheet at the same time, and the letter may be unfolded or shaken open with a quick jerk.

Controlling the Use of Stamps

W. F. Dickinson, Chief Post Office Inspector, asserts that \$2,000,000 worth of stolen stamps are sold each year in the financial district of New York City and that there are at least 35 "stamp brokers" who buy stamps from office boys and others, and again resell them, by offering a rebate, to the same persons when they are sent to the post office to purchase stamps for the firm.

Postage stamps are money, and the same care should be taken to safeguard them. This caution applies not merely to the methods for checking the legitimacy of their use but to checking the purposes for which the stamps are used.

Centralized control in issuing stamps, mechanical stamping machines which register the number used, the imprest system applied to stamp accounts, perforating the stamp with the firm's initials and the like are fairly effective in assuring the manager of the legitimacy of their use. But the loss of stamps in "personal use" is small compared to the constant leakage due to extravagant circularizing campaigns, careless addressing, duplicate mailing lists, improper mailing classification, excess postage dues, sending two letters when one stamp would carry both, and losses due to lack of acquaintance with postal regulations covering return postage guarantee, and the like.

The correction of all these wastes does not lie, to be sure, solely within the mailing department. Yet, a mailing department that is alive to its duties can make investigations and recommendations that have a direct money-saving value. Suggestions as to what may be done are given in the following sections.

Waste Due to Duplication of Envelopes

A large concern doing most of its business through agents and dealers discovered through the investigations of its mail

clerk that several letters from each of a large number of these agents came to the home office with the same mail delivery. To ascertain the amount of this waste the clerk began to record the number of envelopes from all agents in each mail and the weight of each letter which he compared with the postage paid to carry it. The investigation disclosed: (1) An average of $1\frac{1}{2}$ envelopes came by first-class postage in the same mails each day from each of 200 agents. (2) The duplicate envelopes usually contained paper which could have been enclosed with other mail without extra charge. (3) The waste due to this state of affairs was not represented solely by the extra 100 stamps needed to carry the excess mailings of the agents, but the cost of the envelopes, addressing, and the mailing of the extra letters, which in this case amounted to 5 cents per letter. Counting 300 mailing days in a year, the annual waste was over \$1,500.

Encouraged by the possible savings thus disclosed, an investigation was begun at the other end. Here it was found that the outgoing mail was stamped and sorted as it came to the mailing desk. As a consequence, the firm was sending out hundreds of envelopes and stamps that were not carrying their full quota of mail. There was a loss on the outgoing mail about equal to that on the incoming mail or an annual total waste of \$3,000.

Checking the Mailing Lists

A mailing list is as vital to many businesses as spark plugs to an automobile. Let the list get well coated with the dead matter of "not found" names and the spark which explodes the energy generated at great expense in the preparation of catalogues, booklets, circulars, letters, etc., will never materialize. A New York clothing house sent out its annual fall style book. One substation of the Chicago Post Office received 600 of these books, but only one-third of them could

be delivered because the people addressed could not be found. The postage cost was four cents but the catalogue itself was worth twice that amount—and this was not all the loss sustained. Since there was no return postage guarantee on the envelopes the firm lost the opportunity to check up its mailing list. This might have been done by sending the list to the post office in advance of its mailings and “not found” names could have been marked off. This service of correcting mailing lists is optional with postmasters, but most of them prefer checking up the lists to handling the unclaimed mail.

A valuable aid in gaining the postmaster's co-operation is an offer to pay the clerk (say 30 to 40 cents per hour) for any overtime spent in checking up the list. Also, it is well to call the attention of the postmaster to the Postal Laws and Regulations, Section 547, page 270, where he may read the law giving him the authority to comply with the request. A recent letter sent to 1,500 postmasters got only one refusal.

“Postage Due 1¢”

It is more profitable to have a good “weigher” rather than a good “guesser” at the mail desk. A good guesser will miss about one in ten and it only takes a loss of one cent each time to run up a high percentage on every hundred stamps used. Scales cost but little and the saving in postage soon pays for them. Moreover, the weighing of letters eliminates one of the minor possible causes of irritation when the concern is seeking to secure the good-will of the public. A “postage due” letter is never welcome and generally starts a feeling inimical to the firm sending it out. There is no place in the whole business world where the lack of one cent counts for so much—no, not even in the trial balance sheet.

Return Postage Guarantee

The attention that must be given to distribution costs grows larger every year in American business policy. The growth

of the mail-order business marks a new era in the methods of merchandising—the era of the catalogue. Sales by this method today amount to over \$600,000,000 annually, one firm alone sending out 50,000,000 catalogues of all kinds. The value of these “silent salesmen” is much more than the postage necessary to have undeliverable copies returned, hence the importance of the return postage guarantee.

In using this privilege all that is necessary is to stamp or print on each envelope or wrapper the single phrase, “Return postage guaranteed.” This is all the postal regulations require. In case the guarantee is not lived up to, the postmaster may thereafter stop mailing notices of non-delivery to the defaulting firm.

While lack of knowledge of postal regulations may cause large postage wastes, mistakes in addressing letters constitute a steady drain which in the aggregate far surpasses most other postage losses. Placing the wrong city address beneath the correct street address, or the reverse, is a type of the mistakes made. Every firm should have some means of checking up such carelessness and one way is to have a return postage guarantee upon all mail matter. A study of the returned envelopes will generally furnish much food for thought and indicate to the office manager the care and accuracy with which the mailing list is checked and compiled.

The Mail Clerk's Opportunities and Responsibilities

Often a skilled mechanic will discover practical ways of handling a machine that never occurred to the manufacturer or even the inventor. Similarly there are clerks that have become masters of their jobs, who can suggest improvements in methods of carrying out policies formulated by their executives.

Few office positions offer better opportunities for showing initiative than the position of mail clerk. Opportunities

present themselves most frequently in those parts of a business organization where the greatest number of activities converge. The necessary adjustments which are being made continuously call for the exercise of judgment. The mail department is the neck of the bottle—the “narrows” through which run most of the communications which lead into and out of the organization. The drawing up of time schedules, the discovery of the best means of conveyance, the scrutiny of the various expense factors and even of the general conditions surrounding the handling of the firm’s mail, call for alertness and judgment.

Frequently advertising managers plan an extensive circularizing campaign without thought of the part that the postage plays. Circulars prepared for enclosure with letters are so bulky that the letter requires excess postage. Catalogues are often printed on heavy paper, when a lighter stock with its postage economies would serve the same purpose. Again, very large catalogues are sent by mail when they could be sent by express at less cost; or large deliveries of catalogues may be effected with still greater saving by using the freight facilities. In such cases the sender arranges with some local delivery man, perhaps with telegraph messenger boys, to make the distribution.

The mail clerk should know more about matters affecting the mail than any other person in the organization. If the paper for letter-heads, envelopes, or forms is heavier than needed from the point of view of postage costs, he should be ready to suggest a remedy. Or, if an emergency arises through some hasty decision on the part of an executive who has not taken the mailing factor into consideration, he should be ready to inform, or if need be, warn the executive of the situation. If, say, a real estate agent decides late on Friday afternoon and on the last day of the month to send out excursion tickets for the next day to a large number of prospective

real estate purchasers, this might be excusable since he is not familiar with mailing conditions. But such an order ought not to get by the mail clerk without objection. He knows from his familiarity with conditions that the mail on the first of the month is heavy with the regular monthly bills and that the chances of the timely delivery of the tickets are very slim. Here is not only an opportunity to save stamps, tickets, and a large number of prospects from disappointment, but a chance to display that initiative and good judgment which every employer holds to be the main reason for promotion.

Tying the Outgoing Mail to the Railroad Schedule

Setting standards in the mail department does not need a thorough analysis of the government mail service, yet a study of train and delivery schedules will disclose the best time for scheduling the outgoing office mail. If the company has a large number of branch offices throughout the country, a similar schedule can be arranged whereby their mailings will tie in closely with the schedules of the express or through trains which carry the mail to the home city. Thus, the Guaranty Trust Company of New York City has worked out schedules for all the important through trains. The messengers collect the departmental mail every fifteen minutes and bring it to the mail room where the mail for the agencies is sorted into distribution boxes. As the time approaches for closing the mail, the correspondence for each agency is gathered in one or more envelopes. Special messengers then take the mail to the post office, every effort being made to get it off on these express trains. Such a schedule might be as follows:

Send Out Mail	A.M.	P.M.
For New York City	8:30	5:30
“ Chicago	8:30, 11:45	5:30
“ Richmond	8:30	1:30, 5:30
Etc., etc.		

This method not only insures quick delivery but is economical as well. One company which followed this method found that outgoing mail which heretofore had been sealed, stamped, and carried to the post office five times a day was now done in two deliveries with a gain in transportation time.

Special Mailing Departments

The outgoing mail of some departments often becomes so large that it does not pay to send it through the general mailing department, except perhaps for the single purpose of taking it to the post office. In such cases special mailing departments must be provided. These are most frequently operated in connection with the collection, advertising, billing, circulation, special service departments, and the like. As a rule, the correspondence and mailing activities of these departments are so highly standardized that the correspondence is performed almost automatically by following form paragraphs and the mailing work is done by following addressograph lists of names. The functions of such departments partake of the nature of the correspondence, filing, and mailing departments.

For example, the billing room is in reality only a highly specialized mailing department, while the general duties of a collection department are the proper recording and collection of all debts. This includes the preparation and mailing of bills or notices of payment and the preparation of receipts of payment; and, if no payments are made, the setting in motion of the machinery for bringing pressure to bear upon delinquents. All this requires correspondence, filing of addressograph lists, and the sending out of the mail. But as the conditions surrounding collections (especially where instalment methods are used) are much the same, standardized letters may go to whole classes. Likewise, the mailing lists may be arranged according to periods of payment geo-

graphically and the like. A common practice when a certain group of collections is to be made is to send notices on which the names and addresses are printed to the mailing section of the collection department. These are placed in window envelopes. Sealing and stamping is done by an automatic machine at the rate of about 150 per minute. In some cases where it is important to have a record or receipt of matter mailed as in the case of the collection of insurance premiums, the premium notices are placed in locked boxes which are not opened until delivered at the post office. There an affidavit is made and attached to each mailing list certifying that the notices therein mentioned were mailed on the date stated.

Standards of Performance in Mailing Department

How many letters can be opened and sorted for distribution in an hour? As soon as such questions arise the office manager begins to realize the value of standards. He may know what his own office force is doing but he wonders if he is getting as much work done as other office managers. He wants a standard by which to measure his own efficiency.

Although little has been done in establishing time standards for performing the routine of office work, it is now generally recognized that such performances can be measured. Answers to a questionnaire sent out to a hundred or more office managers by W. L. Chandler of the Dodge Manufacturing Company, disclosed that each concern had certain special features attending the opening and sorting of the mail which made its standard vary from all others. Nevertheless, it is very helpful to an executive if he knows the limits within which the majority of offices of his class are working.

From the replies to the questionnaire concerns were roughly divided into two classes: (1) concerns which open their mail with great care, reading each letter before distribution; (2) concerns which merely read enough to learn to whom

the letters should go for proper attention. For the first class a general speed of 60 an hour prevailed, while the second class showed that an average of 200 per hour could be maintained.

To indicate the wide variations that exist, the report shows that one firm opened and sorted 400 letters per hour. The conditions here were particularly favorable for standardizing the form of mail matter. This concern had many branch houses that sent their letters in large envelopes without folding, with the subject and department references clearly shown.

Again another investigation showed that a high average was reached by a concern that carried its standardization into its operations. This firm studied the operations carefully and found that 13 motions were used to open the mail. A further study showed that this work could be done in 6 motions. When the new method was adopted, the output jumped at once from 100 to 200 an hour. But the work of standardization did not stop here. By adapting the mail opening desk to the special work required of it and by arranging the opened and unopened letters in the most convenient way, the rate was increased to over 300 per hour. This is an example of the true scientific method, since efficiency is gained by the elimination of false, useless, and tiresome motions and at the same time the worker is trained in accuracy.

Standards in Folding and Enclosing Letters

A second leading question involves a consideration of the outgoing mail: How many letters can be folded and stamped in an hour? Here it is possible to suggest general standards. The conditions are under the control of the office manager and there are fewer variables to affect them. In most offices this operation takes place at the close of the day and thus a burst of speed is necessary. The output as shown in the report referred to above varied from 575 in one concern to

as low as 200 in another. Five hundred an hour, however, did not seem a particularly high goal of attainment where window envelopes are used to obviate the necessity of looking for the correct address. An experiment in "motion study" worth quoting, since it emphasizes the rewards to be gained through a careful analysis of every operation, is the following:

"A boy was taken from a broom factory where he had worked on piece-work and put at a bench to make up packages of various pieces of printed matter preparatory to mailing. By arranging his piles of printed matter and wrappers to suit his greatest convenience, he turned out 350 packages a day where before only 50 packages were made up."

Standards in Stamping Envelopes

A clerk who can affix only 500 stamps an hour is not working efficiently. It is possible to raise the rate from 500 to 3,000 per hour by arranging the work properly. On the other hand, 3,000 stamps per hour is excessive if the rate is kept up for any length of time. Where the volume of outgoing mail is large its stamping is most economically done by machine. An electrically operated machine will seal, stamp, and count from 7,000 to 15,000 envelopes an hour. The stamps are locked in the machine and recorded as they pass upon the envelopes. This gives an accurate and automatic check upon the postage account. An ordinary office boy or girl can operate the machine and do the work of eight or ten clerks. The Butterick Publishing Company claims that its mailing machine saves its cost twenty times a year. For smaller concerns, there are available a number of hand machines capable of stamping 3,000 letters an hour.

CHAPTER XI

THE ORGANIZATION OF A MESSENGER SERVICE

The Need of a Systematic Messenger Service

While in many offices verbal communication between departments is carried on largely over the telephone, in every business house there is a constant stream of papers and records passing from desk to desk and from department to department. The mail needs to be distributed and collected, correspondence has to be sent to and from the files, written instructions must be carried from executives to subordinates, and employees frequently need to consult documents and records in the custody of others. When the communicating means consists of a number of office boys whose coming and going is not regulated, and who are at the beck and call of all and sundry, it not infrequently happens that no boy is at liberty to carry a message just at the moment when he is most urgently wanted. This spasmodic and unregulated messenger service results in much coming and going of employees with its attendant confusion, laxity of discipline, and waste of time.

If, on the other hand, a systematized messenger service is organized on a frequent schedule, and boys are instructed to make the rounds of departments and desks at stated intervals—thus acting as a connecting link between departments and desks within a department—such a service, when dependable, is an invaluable aid to the systematic flow of work and the efficiency of all departments. The confusion resulting from haphazard service is eliminated and the machinery of the whole business, from the highest executive down to the lowest clerk, is found to run more smoothly.

Steps in the Organization of a Messenger Service

The first essentials of good organization in the messenger service department are well-defined jobs, definite duties, and close inspection. These things make for exactness and responsibility and bring home to the more or less irresponsible nature of boys the seriousness of business. The messenger service should also have a distinct place upon the organization chart of the business and, if its personnel is large enough to warrant it, a junior clerk or the head office boy should be in charge.

Such a service, in order to be efficient, must be carefully planned and controlled. A schedule providing regular trips and regular stations throughout the various departments is the first requirement. The frequency of the rounds, which will of course depend upon the nature of the business and the requirements of different departments, may range from the ten-minute service of a busy manufacturing concern to the hourly service of the small mercantile house.

Having determined the schedule and the routes to be covered, a sufficient number of boys should be allotted to the duty of maintaining the service, while as many as may be required should be held in reserve to handle special messages and any other simple and general duties in the doing of which the boys can serve their office apprenticeships. To insure the regularity of the service, two things are necessary. Each boy must be told exactly what he is to do and when to do it, and means must be provided for checking up the regularity of deliveries and collections so that responsibility can be placed for delays and omissions. Boys in particular need this close kind of supervision. The responsibility of their work can only be brought home to them when they are furnished with a list of individual duties printed upon a card, framed, and placed upon each boy's desk. The following is typical of such a list:

John Smith
Messenger Boy

8:00. Special file collection.

Make collections and deliveries continuously from
8:30.

Make collection of dictated cylinders after each round
of deliveries.

Count envelopes of incoming mail right after lunch.
Answer buzzers and make up carbons in the after-
noon.

Regular collection and delivery stations should be placed where required and provided with baskets into which certain kinds of matter are always put. This saves time in sorting the material. The common practice is to have three compartments or baskets, one to take incoming papers, the second to hold outgoing matter, and the third for correspondence to be returned to the files. A suitable carrying device should also be provided with compartments into which the different kinds of mail, memos, records, and the like may be classified. This saves time at the end of each trip, for the sorting is largely completed; and, in the case of matter returned, the material can be easily sorted as to destination and sent out for distribution on the next round.

Checking up the Service

To prevent delays and errors and to place the responsibility for carelessness upon the boy causing the trouble, the messengers are provided with sets of cards, one for each basket. Each card is marked with the time of collection and every time the messenger empties a basket he leaves in it a new card showing the last delivery. The inspection of the service by the head messenger boy or chief clerk is thus made easy, since there is always a card in the basket marking the time of the last visit to any station.

Manual of Instructions

Some firms go still further than the list of duties already referred to and prepare a manual of instructions covering the work of the department as a whole. The boys are expected to learn these instructions and be ready to answer questions concerning them. The following headings will indicate the ground covered by the rules:

1. Learn the rules.
2. To whom responsible (organization of department).
3. Courtesy.
4. General conduct (reading, smoking, etc., during office hours).
5. Personal appearance.
6. Punctuality.
7. Accuracy (enclosing correspondence, dusting desks, etc.).
8. Economy (pencils and stationery vs. money and time).
9. Team-work.
10. Observation. (Study the organization, names of departments, kinds of work done, etc.)
11. Attention.
12. Concentration. (Do not attempt to answer questions until all instructions have been heard.)
13. Visitors (treatment and how to handle them).
14. Answering annunciator.
15. Answering the telephone.
16. "Don'ts" for office boys and messengers.

As samples of the above rules the following may be quoted:

"The annunciator shall be answered promptly and messages delivered quickly and accurately. Listen carefully to what is being said and let the person who is giving you the

instructions know that you have understood him. It is better to ask to have a message repeated than to deliver it incorrectly.

"The telephone shall be answered promptly in the following manner:

1. Remove the receiver and say, 'Mr. A's telephone.'
If there is no answer, repeat the statement. Speak clearly and distinctly, but not too loudly, directly into the mouth piece.
2. If Mr. A has stepped out of the office, you will say, 'Mr. A has stepped out of the office. Do you wish to leave any message?'
3. If the person wishes to leave a message, take it, together with his name and telephone number."

As examples of the things the boys are not to do, the following list of "don'ts" may be quoted:

1. Don't try to do things without understanding the instructions or directions given you.
2. Don't take a chance on getting things straight. Unless you understand fully what is wanted, ask for further information. Even if persons are impatient in giving further instructions, don't hesitate to ask for them. The request will be excused, but anything done stupidly because you do not understand what is wanted will never be excused.
3. Don't receive instructions and then do nothing. If you don't know what to do, ask.
4. Don't try to cover up mistakes. You will not succeed. Go to the person concerned and report the mistake.
5. Don't talk too loudly or act disorderly in the office or hallways.
6. Don't loaf, kill time, or neglect your duties, but move about quickly and quietly.
7. Don't interrupt a busy man merely to hand him a paper. Wait until you are spoken to.

8. Don't guess when asked for information. Unless you know, find out from someone who does before you answer.
9. Don't be careless in the handling of papers. Every paper is valuable and its loss may cause a great deal of trouble.
10. Don't be late and don't be afraid to stay a few minutes overtime at night if your services are required. The boy who watches the clock and bolts the office at exactly five o'clock will advance but slowly.

Stimulating Ambition by Rewarding Service

Another means of adding dignity to the work of the messenger service is the grading of the boys according to salaries. One large company employing 20 office boys divides them into three classes. The wages of the first class are \$6, the second class \$7, and the third class \$9 per week. Upon entering the office the boy is put in the \$6 class and given a red button to be worn in the lapel of his coat. When promoted to the next class he is given a blue button and so on up the scale as fast as the quality of his work merits it. If a boy in one of the higher classes gains a sufficient number of demerits through disobedience, negligence, tardiness, etc., he is put in a lower grade, his salary proportionately reduced, and the fact published by a change of button. Boys of the highest class are further graded according to their records; but other things being equal, the boys longest in the service are given the preference when promotions are made.

Tasks involving judgment and tact are given to boys of the highest class only. Officials can tell at a glance whether or not the boy is to be relied upon by the color of the badge worn.

Piece Rate and a Bonus System of Payment

A large manufacturing concern with hundreds of messenger stations widely separated, found it difficult to control the

movements of its messengers. It was decided finally to put the responsibility for their work directly upon the shoulders of the messengers themselves by adopting the piece-rate system of payment. For each message up to 70, a rate of one and one-half cents per call was allowed, and for every one above 70 a rate of one cent per call. Although the rate is uniform for all messages and the distance traveled is not considered, it has been found that over a period of time the work falling upon the messengers is about the same. Thus boys who exert themselves to do their work with thoroughness and dispatch are paid accordingly.

By putting the office and messenger boys' jobs into their true relationship to the business as a whole, the boys see and feel their responsibility for the success of the concern. By affording opportunities for instruction in the duties of their department, the boys become interested in their work—and once interested, efficiency follows as a natural result. Also, the manager who follows the work of this department closely has every opportunity afforded him of testing the fiber of the boys, and when a vacancy with higher responsibilities occurs he has ready for the position someone trained and tested in the spirit and policy of the concern.

Memorandum Forms

Interdepartmental messages should not be written on any kind of letter or scrap paper, as in the majority of cases such messages need to be filed for future reference when it may be necessary to place responsibility. Suitable memorandum forms, distinctive in color and of two or three standard sizes, should be provided for such correspondence. The special color marks the source of the message at once, while the sizes make it possible to select a sheet to suit the length of the message. Such a memorandum form may be had as follows:

OFFICE MEMORANDUM

To _____ Date _____
 From _____ In re _____

The Standard Memo Slip

In offices where messages between departments are largely of a routine nature it is possible to economize time and space by standardizing their forms and expression, as follows:

DELIVER TO	INSTRUCTIONS
Mr. Strong Bookkeeper	Confer
" Jones Credit Dept.	Return with papers
" — Shipping Dept.	Note and file
" — Discount Dept.	Note and return
" — Files	You reply
" — General Bookkeeping	Prepare letter—I will sign
" — Note Teller	Investigate and report
" — Securities Dept.	Draw check in payment
" — Statements	Usual course
" — Transit Dept.	Confirm signature
Accounting	Comply
Auditing Dept.	Decline
Credit Dept.	Directors' Meeting
From Mr. _____	

Standard Memo Slip

This memo is employed by a large bank. Its time-saving feature will be readily understood by showing how it is used. If an officer of the bank receives a request for a loan, he does not need to write out a memorandum to the credit department, but simply takes out one of these standard slips, puts a check mark before "Credit Dept." in the column "Deliver to," and another before "Investigate and report" in the column headed "Instructions"; signs his name at the bottom; sticks the slip to the correspondence (one edge of the slip being gummed);

and, finally, tosses the letter into the outgoing basket—all of which takes only a few seconds.

Magazine Delivery Service

A variation of the standard slip is employed by concerns which have adopted the useful practice of passing certain magazines among interested department managers. The librarian, upon the receipt of a magazine which has been listed to go regularly to a number of persons, pastes a "sticker" at the top of the front page and checks off the names to whom it is to go, as shown below.

DELIVER TO	DEPT.	DATE	REMARKS AS TO CLIPPING AND FILING		
			WHOLE ARTICLE	PARAGRAPH ON PAGE	INDEXES
<i>Frank Dodge</i>	<i>Sales</i>				
<i>Henry Greed</i>	<i>Mail Order</i>				
<i>Alfred Noyes</i>	<i>Advertising</i>				
<i>Library</i>					
After reading check your name; send on to the next.					

Magazine Delivery Slip

This slip is also used in sending books, papers, and the like, to responsible employees who have left instructions with the librarian or research department to call their attention to articles bearing upon certain subjects. In this case the librarian puts the page or title of an article upon the slip, writes in the name of the person and the department, and sends the literature to him through the messenger service.

The Office Envelope

When it is necessary to safeguard messages going through the office mail, an "office envelope" is used. This bears the names of the executives to whom important mail matter is

sent, thus making it possible to send the matter to several persons in the order in which they are listed. The first person to receive the envelope removes the material intended for him, crosses off his name and sends the envelope on to the next person whose name appears on the list. Since these envelopes may be used many times, they are made of durable material capable of standing many erasures.

An ingenious method adopted by one firm saves unnecessary work in examining the inside of the envelope. A series of small openings or windows disclose at a glance whether or not any mail matter has been left inside.

CHAPTER XII

THE ROUTINE OF FILLING ORDERS

The Place of the Order in the Office Routine

Perhaps no better vantage point can be taken to get a general view of the activities of an office than in the order department, for two reasons. First, the original order for goods, as explained in Chapter I, is the basic record out of which grow all of the initiating orders to the various departments dealing with the transaction. The order department makes out these various orders or "copies" and distributes them to the several "heads." Secondly, the order department acts as a center of control for the various activities which these "order copies" set going. In every office, records and a system must be provided for controlling the selling of goods, the receipt, acceptance, interpretation, and filling of the order, the shipping of the goods to the customer, the collection of the money, and the record of the financial results. Therefore, the method of communicating the contents of the order from department to department, or from one group of employees to another, is important. If wasted energy and lost motion are to be avoided the office manager must lay down the procedure best fitted for the type of business under consideration. The sooner this is done the fewer will be the encumbrances and time-wasting methods that will attach themselves to the office routine. A study of Figures 2 and 3 (pages 7 and 8) will emphasize these points.

Analysis of Forms Required

How extensively the barnacles of needless detail tend to collect around the order system of an office is illustrated by

the experience of a large typewriting house. After making an analysis of functions and duties this concern found that, of the 29 operations used in recording and filling an order, the majority were unnecessary. What was essentially one piece of information was actually divided into 29 parts. All these clerical operations were then combined into one set of forms upon which were transcribed, at one writing, the entire details of the order. Each of the forms bore the same serial number, giving a quick means of identifying the order at any time. A simple analysis of the functions connected with the order routine quickly separated the essential from the unnecessary procedure and showed the number of forms needed to convey this information to the departments concerned. It was then a simple matter to devise a set of records to furnish the information required at one writing.

Personnel of the Order Department

The head of the order department, who is sometimes a member of the accounting staff, is commonly known as the "chief order clerk." His duties are largely confined to the interpretation of orders; i.e., he translates the customer's order into the terms and symbols of the stock and of the routine of the business. One or more entry clerks usually record the order with its number and manifold clerks make as many copies of it as the routine demands. In addition to supervising the work of his subordinates the chief order clerk is, as a rule, made responsible for seeing that the shipping schedule is carried out.

The Routine of the Order Department

Where it is the practice to let each department head decide the working schedule of his department under the general supervision of the office manager, the order department simply acts as a clearing center through which each department re-

ports the time an order will be put through. The order clerk, for instance, when sending the stock copy of an order to the factory or stock department asks for a statement of the probable date of delivery. He then files the office copy under the delivery date in his tickler (or probably a few days ahead of this date). This date is also sent with order copies to the shipping and traffic departments. These in turn file their copies and report back to the order clerk the probable shipping dates and traffic arrangements. A few days before the delivery of a certain order is called for, the order clerk is automatically notified by his tickler of this fact. He then calls up the shop or stock room and gets these departments to assure him that all is well—or if not, to give him another approximate date when the order will be finished. Time is therefore allowed to readjust shipping and billing schedules and perhaps to notify the customer who is about to be disappointed by a delayed shipment.

The Clerical Work of Filling an Order

All orders should be numbered consecutively as received, and the number used to identify the order throughout the office and in corresponding with the customer. To this end the order number is entered on all copies which go to the customer who is requested to use this means of describing it.

After the chief order clerk has classified the order and indicated his interpretation by key numbers, it is taken in hand by the entry clerks who make the required number of copies. These naturally vary with conditions, but the following duplicate copies are typical of those commonly made:

1. Office Copy. To serve as a permanent record of the order and kept in the office.
2. Sales Copy. To be used in making up the sales department's purchase records.

3. Acknowledgment Copy. To be sent to the customer as an acknowledgment of the receipt of his order.
4. Factory Copy. (Where orders are filled from stock.) To act as a check for the production manager in regulating the flow of production.
5. Stores Copy. To be used in filling the order. Copy sent to stores department. (One copy is sufficient, provided the entire order is filled by one department.)
6. Shipping Copy. To be used as a check against goods received from the factory or stores. Sent to stores department.
7. Traffic Copy. To be used in routing and checking shipment. Sent to traffic department. (Stores or factory copy may be used for this purpose. If so, this copy is not needed.)
8. Invoice Copy. To be sent to the customer as an invoice.
9. Other Copies. Sometimes, depending upon conditions peculiar to the business, a firm finds it useful to make out other copies as follows:
 - (a) Advertising Copy. To be used in its records of classified sales.
 - (b) Charge Sheet Copy. To be used by the accounting department in making its entries.
 - (c) Extra Invoice Copy. To be used by accounting department as a ledger record.
 - (d) Label Copy. To be used as shipping instructions when pasted on shipment by shipping department. (Only such part of original copy as is needed is used.)

- (e) Shipping Receipt Copies. To be signed by transportation companies.
- (f) Monthly Summary Copy. To be used in periodical summaries.
- (g) Work Copy. To be held in file pending the completion of any work attending the installation of some machine, equipment, etc.

Example of Order Form and System

To illustrate the order form in its natural setting, the order system of a large gas company conducting 28 branch offices with customers varying in number from 1,000 to 100,000 per office, has been chosen for description. Many gas and electric companies, as is well known, sell not only gas and current, but many kinds of appliances such as lamps, stoves, and gas mantles. This business is promoted by salesmen in the field as well as by local advertising and finely equipped merchandising rooms. Thus, orders arise from three sources: floor salesmen, solicitors, and by mail. In the first case the money is received with the order and the goods are taken away by or delivered to the customer. To provide for these conditions only three copies of the order are needed and the form itself is comparatively simple. The payment of cash eliminates the credit risk and hence the attendant investigation. For convenience of recognition, each of the three copies is given a distinctive color—in this case white, pink, and blue. The form used is shown in Figure 24.

The white sheet is retained in the order book, the other two sheets are stamped "Paid" by the cashier, the pink sheet is handed to the customer with the merchandise, and the blue sheet is retained by the cashier. At the end of the day the blue sheets are sent to the sundry sales department where they are checked against the white sheets which have likewise been

GAS COMPANY			
No.....			
Date.....			
Clerk.....		Am't Rec'd.....	
.....			
Customer's Name.....			
Address			
	NATURE OF ORDER		
Terms			
Meter .....Service.....House Piped.....			

Figure 24. Floor Salesman's Order Form

Only three copies of this order are made out, customer usually paying cash and receiving goods at once.

sent from the sales floor, after which a summary is made of the cash sales for the day. The original of the order is then forwarded to the bookkeeping department and the blue copy is sent to the storekeeper as a record for material issued from his department.

If an order originates through a solicitor or comes in by mail a form of somewhat different nature is used as illustrated in Figure 25. Five copies of this form are made up in the following way:

1. Original Record (color—orange). (Supposing the order calls for a stove which must be delivered and set up for a customer). This record is taken out by the fitter who does the work, to serve as a receipt when signed by the customer. When returned by the fitter the order goes to the distribution office clerk to be compared with a copy of the order there and then goes back to the commercial office where it originated. Upon receipt of the original at the office, the office copy

Sundry Sales Order No.	Meter	Service	Piped	Salesman
Original Record GAS COMPANY				
Name.....		Date.....		
Address.....		Town or Section.....		
	NATURE OF ORDER			
Terms	Total			
Ledger folio	Classification		Price O K'd by	
Charged by			Credit Passed by	
Date	Sign name here upon receipt of material			

Figure 25. Field Salesman's or Mail Order Form

Five copies of this form are made out, facilitating full record and follow-up until order is finally filled.

is removed from the file and the original is forwarded to the bookkeeping department.

2. Office Record (pink). Remains in office as a record of the order until the order has been executed and the original returned when the office copy is destroyed.

3. Storeroom Copy (yellow). To be presented to the stores-keeper for material and is retained in the storeroom.

4. Invoice Card (blue). To be left with the customer as an original bill.

5. Work Card (pale green). To be filed in the "pending order file" until completion of work thereon, when it is placed in the final geographical file.

Order Routine in Wholesale House

To illustrate the general organization of another typical business, the method followed by one of the largest wholesale grocery houses in the United States is here described.

In this business there are two general classes of sales orders, viz., mail orders and telephone orders. These are handled in the same way, after the orders over the wire have been taken down. The routine followed can best be explained by using a concrete example.

When the mail is opened letters containing orders are turned over to the order department, which in turn copies the order upon an order blank. The order clerk refers to the price files to see what special prices or terms have been allowed, and then fills out the order accordingly. The order then contains the name of the firm to whom the goods are to be shipped, their address, the salesman's name, the bill of goods wanted, and the prices quoted.

The order is now turned over to the credit department where it is O K'd and numbered. From here it passes through a duplicator, the duplicate being held for reference, and the original going to the shipping department. (It is ob-

vious that a carbon copy of the order blank would have saved this duplicator work.)

Here the order is assigned to, say, door number 3, meaning that the goods are to be shipped on the Pennsylvania Railroad. The door number, order number, and name of purchaser, are noted on the order register in the shipping department and the order is turned over to the office at door 3.

In this office the order is recopied upon "floor slips," which list the items wanted from that particular floor, and give the order number and floor number. The floormen on each floor then take the slips and fill the order on trucks. Each package is marked with the door number to which it is assigned and the initial or mark of the floorman to make sure that everything is right. The floor slip goes down to the shipping department with the goods and any stock shortages are noted upon it.

Finally the goods from all floors for this particular order are brought together on a truck at door 3 when they are checked against the original order. If there are any shortages the proper floor slips are again sent up to them. Thus the checker O K's the original order and the truck driver gives his receipt for the goods by putting his initials in a proper space on the bill. These orders are collected at intervals of every few minutes and taken to the billing department.

In following through an order as outlined above for a specific business it will be noted that the forms and procedure conform in part at least to the requirements of section on "The Clerical Work of Filling an Order." The essential needs of any business may be met by the divisions of the work as there outlined and any variations in names or additions to the outline may be made to meet varying conditions.

CHAPTER XIII

FILING—NATURE, SCOPE, AND PERSONNEL

Development of the Filing Department

In the past the expense of a filing department was regarded as one of the many incidental items which made up the burden of "overhead" or operating expense. The problems of filing were regarded as unimportant and left to the solution of junior clerks, or were disregarded entirely and the business "got along" without a filing system. Today the filing department is rapidly coming to be regarded as an important factor in every large organization.

Filing began with unsystematic devices for preserving letters, records, documents, and other business papers. Standardized methods and apparatus, subsequently worked out, have brought development in three lines, which may be summarized as follows:

1. Methods of keeping such material in convenient and systematic arrangement.
2. Methods of preserving new kinds of material, such as:
 - (a) Carbon copies of letters, forms, records, etc.
 - (b) Cuts, graphs, etc.
 - (c) Card index material.
 - (d) Reference material, books, clippings, etc.
3. Methods of utilizing all this material in new ways.

Thus, filing has become an important part of the entire business and most large concerns have now a distinct filing department, while in some businesses there are several such departments.

Functions of Filing Department

Methods of filing vary greatly at present in different lines of business, according to the nature and problems of the business and in individual concerns according to their utilization of possibilities.

The filing department has been called a systematized memory. The term is correct so far as it goes, but is not broad enough. Its functions may embrace the following lines and perhaps more:

1. Systematic care of records of all sorts of material not in active use. Such material must be kept safely, in orderly arrangement, must be accessible and yet not in the way. The function here is that of a safe deposit.
2. Service in current business, that is, handling and keeping in order material with which the office is working. Such material must be kept safely, in orderly arrangement, must be quickly accessible, and must be distributed through the office as needed—for instance, at the beginning of each day. Here the function is that of an internal postal system.
3. Collecting, arranging, analyzing of reference material. This may include information compiled by the statistical force in various departments on cards or otherwise. It may include clippings and suggestion memoranda; reports, articles, books, etc. This material must be kept safely, must be sufficiently analyzed and catalogued, and be reasonably accessible. Here the function is that of a library.

Perhaps no one business house engages in all the above branches of filing activity. Few concerns have studied out and developed its possibilities systematically. In almost every case the filing department has just "growned," and development has come by departments. One department of a concern may have a highly developed filing system; other departments may never make use of its possibilities. In fact, it is usual to-day, except with a few large and progressive concerns, to have

several files in their various departments practically independent of each other.

Office managers have given attention only to caring for special and immediate needs. They have been concerned with immediate convenience, safety, expense, and to some extent, appearance. Attention has centered upon perfecting the mechanical equipment. Such discussion of filing as is found in books and periodicals deals with the subject almost entirely from the point of view of the file clerk, treating details of classification and arrangement, the quality and variety and equipment, etc.

The tendency is now toward systematic and constructive treatment of the subject of filing. Progress is being made from two points:

1. Business houses are realizing the possibility of saving waste and eliminating the duplication of equipment and labor. Well-developed filing departments, moreover, are studying possibilities of service and discovering new uses and applications.

2. Filing equipment companies have been developing service bureaus of their own. Some of them now have records and models of filing systems worked out in a large number of business houses, and they are spreading the knowledge of these among other customers.

The Work of the Filing Department

The problem of the filing department is mainly that of devising a system to fit the needs of the business. Problems of personnel and of control are relatively secondary. The operations to be provided for are:

1. Collecting the papers to be filed.
2. Classifying and arranging this material—"filing" it in the precise sense of the word. The system must be flexible enough to provide for expansion.

3. Finding material as called for.
4. Distributing material from the files in connection with tickler service.
5. Recalling papers from various departments after being used—what is known as the collection follow-up.
6. Replacing papers in the files after using.
7. Transferring and destroying material.

To these might be added:

8. Modifying the system in details as may be found necessary.
9. Discovering new ways of using the material in the files.

Examination of the above list shows that it may be grouped into three general kinds of activity: (1) devising and improving the system; (2) collecting and distributing the material through the office; and (3) handling and caring for the material in the filing room. The first of these activities the office manager can supervise more or less directly. The second and third activities must be attended to by file clerks and other employees. The matter of gathering and distributing filing material with promptness links up with the general messenger service. The method of handling the material in the filing room must be dictated by the needs of each case.

Similarity of Filing Work to Other Departments

The filing work is similar on one side to the mail, and on the other side to bookkeeping and accounting. In the case of the mail, as noted in Chapter X, the problem of efficient handling is one of finding ways of treating numbers of individual items by a standardized procedure. Its chief requirements are: (1) speed, (2) accuracy in checking a few details, and

(3) ready knowledge regarding routing, etc. Machines may be used to advantage in certain parts of the work, such as stamping and folding.

In the case of the filing department, however, the problem remains one of intelligent hand-work. The individual operation remains distinct, although it may be performed systematically, and very swiftly. The needs are: (1) orderly assortment of a multitude of items in logical and obvious classification; (2) sure and quick finding of any item when it is called for; (3) utilization of resources in solving unlooked-for problems. In all this, extreme accuracy is required.

While on its service side the work of the modern filing department approaches somewhat that of the mailing department, in the matter of care of material it approaches somewhat that of the accounting department. For instance, in one large banking concern, most of the bookkeeping of the bond department is done in the filing bureau of that department.

The part of the filing department activity most generally recognized and most fully developed concerns the classification and safe-keeping of papers and memoranda. On this point the practice of business concerns has become practically standardized, with differences merely of detail. Performance of this function requires the adoption of a comprehensive, orderly system of classification or indexing which will provide for: (1) sorting out and placing every item which it is desired to preserve; (2) finding any item readily and with certainty when it is called for; (3) indefinite expansion of the system as the business grows. The system should be as simple as possible.

Service Activities

The service function of the filing department is of more recent development. One part of this connects directly with

current business. For example, in the Remington Typewriter Company, instead of the individual official keeping in his own care the papers and memoranda which he needs from day to day for a piece of work, they are taken in charge at the end of the day by the filing department, to be returned to him at the time the official appoints—the next day or some future day. This clears the desks, lessens the chance of forgetfulness, keeps all papers in orderly arrangement, catches duplication of work, and, moreover, enables the filing department to discover and collect any papers which have been kept over time.

The advantage of such use of the filing department in connection with current business is obvious. It requires, however:

1. A prompt and efficient system of collection and distribution of papers from all parts of the office, which in turn implies a good messenger service.
2. A careful tickler system to furnish each official the papers which he needs at the time he needs them.
3. Co-operation by the officials in all departments. Unless the officials generally make out tickler cards, and unless they refrain from keeping papers on their own desks, the system cannot work.

Use of Tickler System

The system in use at the J. F. Tapley Company offers a good illustration of the tickler system. It is founded on the principle that the general files should at all times be complete. Accordingly, two carbon copies are made out for every letter sent out from the house, the two copies being of different color. The matter is not left to the stenographer's discretion. The copy that goes into the general files is signed at the bottom with the initials of the writer. If the tickler is not necessary it is simply destroyed. If, however, the correspondence per-

tains to matters that should be followed up, the writer puts his initials on the upper left-hand corner of this tickler copy. This is in case the writer himself wants to follow it up; if the follow-up is to be attended to by someone else, that other person's initials are put down. Underneath the initials the date is noted on which the copy is to come up to the attention of the person designated.

During the course of the day there arise many matters for which there is no correspondence and which will require attention at some future date. A special form has been devised to take care of this. Whenever anyone wants a certain thing to come up for attention at some future date he simply jots it down on this form, which has space provided for the name of the person to whom it will go, separate columns for the day, month, and year when the tickler should come up, and a line at the bottom reading, "Please report to....." when this has been attended to. (Signed)....."

Operation of Tickler File

All these tickler carbons and tickler forms are placed in the outgoing basket on the desk of each person and are sent to the tickler file. This is an ordinary vertical file made out by days, months, and years. Most of the matter falls, of course, into the folders devoted to the approaching thirty days. While there are a number of ticklers for matters to be considered two and three years hence, they are naturally not as voluminous.

All these ticklers are picked up several times a day by a filing clerk whose special duty is to collect or distribute them and to care for the tickler file. Every morning the ticklers for that day are taken out, sorted, and distributed according to persons whose initials are on the upper left-hand corner. This system permeates the whole plant. Nothing is left to the memory. That the management is satisfied that it should

be so, may be inferred from the fact that it encourages the employees to send even personal matters to the tickler file. For this purpose a sealed envelope may be used. The object, of course, is to get every individual into making out ticklers as an automatic operation.

It should be noted that the successful operation of the system is largely due to the systematic application of the principle of centralization to the company's files. There is only one exception; a separate card index tickler is kept relating to prospective sales, bids, etc. The convenience of having all these matters separate is obvious.

Another part of the more recently developed service activity of the filing department is its utilization in constructive work, in finding business. Through careful analysis of material collected for other purposes, in the correspondence or credit file, for example, suggestions are gathered for new leads. Special information files may be maintained for the purpose of gathering new data regarding business conditions, etc., which may serve to suggest additional new leads.

Material Handled by the Filing Department

The range of material handled by the filing department is very wide. It may include both vertical filing and card index filing, as follows:

1. Correspondence
2. Credit reports
3. Records relating to sales and purchases
 - (a) Orders
 - (b) Accounts and collections (card ledgers)
 - (c) Invoices
 - (d) Quotations, etc.
4. Other records
 - (a) Production and cost records
 - (b) Documents and legal papers

- (c) Blue-prints of drawings; maps and charts, cuts, etc.
- 5. Information and data files—books, articles, clippings (library).

A large concern keeps matters of all these kinds in its files, although one or more types may be stressed particularly. The methods of handling will vary with the material.

Card Index Filing

While advancement, in filing papers—vertical filing—has been very marked in recent years, the development of card index filing has not been so rapid. This is surprising in view of the fact that the average business house actually needs and should use a great quantity of card index equipment. The reason for the neglect is probably that the average manager does not know the possibilities of card indexing. The word filing has meant to most managers and department heads only the handling of correspondence or current papers. But if the filing of correspondence, invoices, etc., can be made a productive factor in the organization, the same thing is certainly true of card indexing. For example:

1. It is possible by the use of a card index for the manufacturer to keep his fingers on the actual pulse of his plant, knowing at a moment's notice its productive capacity, cost of operation, and net profits.

2. The proper card index installed in a sales organization means maximum sales activity and a tremendous increase in net profits to the house. It instantly points the way toward greater development in the sale of a standard product and the immediate elimination of articles in the "line" which do not sell readily and prevent a quick turnover of the money invested. An efficient sales follow-up system makes it possible for the sales manager to focus at any time the sales energy

of his firm upon any given article for circularizing or periodical sales campaigns.

3. A "perpetual" stock inventory system installed in either a manufacturing or sales organization's stock department means better service to wholesalers or customers, the elimination of slowly moving stock, the speedy execution of contracts, and prevents the loss which arises from "over stock." It is possible to tell at any time the quantity on hand and to establish maximum and minimum amounts. From these cards can be taken a survey or statistical comparison for use in manufacturing or buying up quantities of material for resale.

4. There is a card index system for the advertising department which will indicate to the advertising manager his most profitable channels for advertising, the "pulling power" of his "copy," and the actual productiveness of his general activity.

These are only a few of the applications of card index filing.

Problems of Special Lines of Business

The filing work required will vary with the nature of the business, e.g., a bank or financial concern requires especially:

1. A Credit File. This will contain confidential information regarding customers, inquirers, etc.
2. Information File. This will contain information regarding business conditions, the standing of concerns whose securities are dealt in, etc. This file may be very elaborate.
3. A Permanent Record File. This covers quotation of stocks, bonds, etc.

Thus the Guaranty Trust Company maintains four large and highly efficient filing departments: (1) credit file, (2) a

central or new business file, (3) a bond file, containing information, and (4) a general file, containing the general correspondence.

An insurance company will have elaborate files regarding its policyholders. In this case the needs are two: first, a compact, complete record; and second, extreme quickness of service. They do not allow the originals of these papers to go out. Instead they photograph them and send the photographed copies.

The central file of the Equitable Life Assurance Company includes:

1. The Application and Correspondence File. This contains all the "primary papers" relating to policies now in force—about 2,300,000. All the papers bearing on one policy are made into one single package and filed under the policy number. This number is placed on every paper which relates to that policy.
2. Subject File. Here a number of matters not relating to policies but occurring in correspondence are grouped by agencies and also by a subject classification containing about 30 headings. This file is relatively small.
3. Death Claims File. All the papers relating to one death claim are grouped together and filed according to a special claim number.

In other departments of the company are other files not under the immediate direction of the central file department. Some of these are outgrowths of the main file referred to. These are:

4. An Assignment of Policy File. The assignments are kept in connection with the claims department.

5. A Canceled Policy File. The canceled policies must be kept accessible. Policies not in force and over two years old are now removed and kept in storage in Brooklyn. Even these apparently dead issues are constantly being recalled and consulted.
6. A Declined Application File. All applications which have been declined are kept with great care as a basis for subsequent use.

In a department store—and retail selling concerns generally—the special problems deal with the index of customers' accounts, and the filing is linked closely with the bookkeeping. Special lists kept by such a concern include: (1) a list of customers' names and addresses, arranged by locality; (2) the stock and materials record.

The mail-order business is peculiar in two points:

1. Perhaps the most important asset of such a concern is its stencil, arranged geographically, as in the case of the Charles Williams' Stores. When this list runs into several millions of names the need for accuracy in arrangement and checking becomes imperative.

2. The temporary filing of orders is another feature in mail-order houses. For instance, in the National Cloak and Suit Company, New York, over 100,000 orders are received daily in the busy season. These are filed by number in light wooden boxes about the size of an ordinary file drawer, but much shallower, kept for three months, and then destroyed.

Manufacturers will give special attention to records of purchases, production costs, and processes.

Export houses file geographically.

Steamship companies file according to names of ships.

Engineers, architects, builders, and contractors file by the job; all the papers relating to one job are put together. Lawyers, accountants, advertising agencies, etc., use essen-

ially the same principle and file by cases. All of these may have also special files of devices, tools, cuts, formulas, etc., useful in their business.

Personnel of the Filing Department

File clerks must be rapid and accurate at detail work, attentive to operations which are continually repeated but slightly varied, and must have automatic carefulness in replacing papers. The nature of the activity calls for intelligent and trained women rather than men or boys. Women can handle detail work with more persistent accuracy and patience and with swift, automatic expertness. The head of a centralized filing department, however, occupying a position coordinate with that of the other department heads, should preferably be a man.

When the work is confined to the storage of papers it may be standardized so as to be handled by girls of little experience and no special training, at a salary of from \$8 to \$12 per week. On the other hand, when the work requires individual care or power of analysis, expert employees must be obtained at much higher wages. For example, the bond filing division of one large company is composed of college women whose salaries are considerably above those of most women.

The filing clerks of large business houses today are almost entirely women who were originally trained as teachers or as librarians. To a considerable extent subordinate clerks are now being trained in the filing departments themselves.

In one large insurance company, the filing department is in a considerable degree a sort of training school for other departments. Clerks who have obtained from their work on the files a ready general familiarity with the activities of the organization are in a position to be advanced to higher paid places in other departments.

The number of the employees required is a matter to be

determined by the special circumstances of each case. It is estimated roughly that one file clerk can usually care for the papers of three other persons (stenographers, billing clerks, etc.). This is in reference to papers dealing with ordinary current business. It is possible thus to calculate about how many filing cases can be attended to by one clerk in the course of a day, and check up her work on that basis. Such calculations are subject to variation. With many business houses the filing involves problems of the peak-load. The later hours of the morning and the last hours of the afternoon when papers are being returned and carbons are to be inserted, etc., are very busy.

For record files, library and suggestion files, etc., fewer helpers are needed than in case of current correspondence files. The work here is more like that in the catalogue department of a library. Where the record and suggestion files are utilized much in the business, more employees are needed to care for them, if the nature of the business brings the peak-load at certain times in the day.

CHAPTER XIV

FILING—STANDARDIZATION AND CENTRALIZATION

Indexing the Basis of Filing System

The vital factor in any filing system is the index, as upon the use of a proper index depends the efficiency of the system, as measured by the speed and accuracy with which any desired record can be found. While this may seem elementary information, the fact is that many purchasing agents or office managers when considering the purchase of filing equipment view the purchase almost wholly from the aspect of cost, giving little or no thought to the all-important matter of indexing. When asked as to how the records are to be indexed, they have no answer ready, considering that this is a matter to be decided by a filing specialist or the firm supplying the equipment. With the proper kind of an indexing system, the papers stored away in any file or filing department should be as accessible as "yesterday's mail," even though such papers may have been stored away 5 or 10 years ago.

The fundamental principles underlying the indexing or arrangement of a "filing system" are simple—so simple that often they are disregarded because of their seeming obviousness.

Classification

The essentials in classification are systematic arrangement, readiness of finding what is needed, and adaptability for expansion. A few standard classifications have been thoroughly worked out, according to:

Alphabet
Subject

States and towns (geographical)

Days or months of the year (chronological)

Numbers

It simply remains for the office manager, or other executive, to apply the fundamentals to his organization properly.

System Applicable to Organization Routine

In contemplating the installation of the filing system, great care should be taken that the general routine of the organization is not modified to fit the filing system; and a filing specialist should not be consulted until an executive is absolutely clear as to just what the needs of his particular organization are.

A great deal of trouble in the filing departments today arises from the fact that the executive has been induced by some clever salesman to install a certain system, without first having analyzed his own business sufficiently to determine whether the proposed system is entirely suitable or not. This is not meant as a criticism of the systems that are on the market, because most, if not all, of the systems offered to the business world by the large filing manufacturers are very efficient, if properly applied. The point to be made is that the responsibility lies entirely with the executive for the application and future success of the features adopted. He must have at his finger tips the needs of the business organization involved. The experience of one of New York's largest newspapers in organizing that part of their general filing department in which the regular correspondence was kept, illustrates this point.

In this instance a so-called alphabetical-numerical system was installed. This consisted of many thousands of cards filed in small card drawers alphabetically under the name of the correspondent. In the upper left-hand corner of these cards was written a number, and this number corresponded

with numbered folders in the large letter files. It was necessary, in the operation of this system, to refer first to the card index files in order to find the number of the folder, and then to the folder in the large letter files to get at a specific letter.

At the close of the day, or perhaps the next morning after the incoming mail had been distributed, it was necessary for the file clerks, when filing away the answered correspondence of the previous day, to go to the alphabetical card index file, look up the names, and enter the number on the letters before the mail could be finally filed in its proper place.

The numerical system, when properly applied, is a good thing and results in accuracy of filing. The fault in this case, however, was that the numerical system was unnecessary. The executives who installed this system did not realize that if it were possible to arrange the names alphabetically in the card file, it was equally possible so to arrange them in the large letter file drawers.

The use of the numerical system in this case for simple alphabetical filing resulted in additional labor and expense without any direct advantage in the handling of papers. The system has subsequently been discarded and a simple alphabetical method has been adopted in its place to the satisfaction of everyone concerned.

The executives, when questioned as to the reason for installing the numerical system in the first place, gave as their excuse the fact that their attention had been centered only upon the accuracy of the number, and that the system had been installed because of this fact, and this fact alone.

Preliminary Analysis

To begin with, in making the preliminary analysis, great care should be exercised in determining the activities of the organization involved, laying special stress upon:

1. The names or titles given to the various papers to be filed.
2. What they are technically called as part of the office routine.
3. How they are asked for.
4. Why the papers are wanted.

The information required by the following questions will aid the executive about to install a filing system in estimating the amount and nature of equipment and the number of file clerks that will be advisable.

1. How many papers of a given kind are received in a month and how many carbon copies of outgoing correspondence will accumulate in that time?
2. How many individuals must have access to a specified kind of paper?
3. How many departments must refer to these records? Do they all refer to them from the same angle or by the same name?
4. How many times are certain kinds of records referred to in one day?

To illustrate the above questions:

1. With regard to the number of papers to be handled—if a firm has, say 10,000 active accounts, at the end of a month it will have accumulated approximately 100,000 incoming letters and 100,000 carbons of replies. To handle this general correspondence would require ten 4-drawer letter files, with an alphabetical set of guides divided into 1,260 parts.

2. As to the number of individuals referring to papers—in the case of a firm with 10,000 active accounts probably 30 people or so would refer to the files. Three clerks would be needed to attend to the filing work. A certain large selling organization uses, merely for general correspondence—

not for orders—twenty 4-drawer files, and employs four clerks. Some 20 people use the files.

Another selling organization with ten 4-drawer files, and 15 people referring to them, employs three clerks.

A manufacturing concern has thirty 4-drawer files, merely for orders. About 100 people refer to the files, and six clerks are employed.

3. As to the varying requirements of different departments—in the case of the manufacturing concern just mentioned, the order files are used by six departments, each from a different angle. The sales department refers according to the *town* where the customer lives; the stock department according to *materials*; the claim department according to *shipping instructions*; the bookkeeping department according to *date of billing*; the advertising department according to *style and brand*; and the salesmen according to *customers' names*.

Six different card indexes are maintained, each in the special care of a different file clerk. To avoid possible clash between departments asking for the same paper, all orders are photographed in the morning before being sent through, and two or three extra copies of each one are made.

4. As to the frequency of consultation—in the first of the sales organizations mentioned above, the correspondence files are consulted about 300 times daily—each drawer from three to four times. In the second sales organization, the files containing correspondence and other matter are consulted 500 times daily, each drawer 12 or 13 times. In the manufacturing company, the files of orders are consulted 1,200 times daily, each drawer some 10 times.

Standardization—Index

The aim of the above questions is to establish, as far as possible, standardization, both in equipment and method of

handling the various records which pass through the filing department.

If records are required by one department according to subject and by another department according to name, they must not be filed by either name or subject alone. A standardized, cross-reference index must be adopted that will accommodate the various departments. Technical or departmental names should be abolished if they are not in common use throughout the organization.

Standardization—Equipment

Certain standards have been adopted in the open market by manufacturers of filing equipment, and every executive contemplating the installation of a filing system, or the solution of filing problems, should first find out what apparatus is to be had on the open market, if he is desirous of saving money and eliminating delay in procuring future equipment.

A constant difficulty in many filing departments is to provide storage space and indexing facilities to take care of the thousand and one different forms for orders, invoices, vouchers, etc., that are in use today, varying in size anywhere from 5 x 3 inches to 15 x 10 inches. If manufacturers and sales organizations would co-operate with each other and with the filing manufacturers, the untidy mess which results from the lack of standardization in vouchers, invoices, etc., could be eliminated; the preservation of these papers in the filing department would be greatly simplified, and the expense of handling such records would be greatly reduced. There are certain standard measurements for these forms, and if this standard were adhered to the installation of systems and the purchase of equipment would be much easier. Cases are not infrequent where purchasing agents have gone about attempting to find a filing cabinet that will fit some thousands of forms already printed up. In many cases it has been impossible

to obtain such equipment, with the result of an entire loss to the organization in money spent for useless forms.

Alphabetical Filing

The alphabetical method of filing should be used as much as possible, as it is the simplest and most expedient method of handling papers. Alphabetical filing should be used when the names of individuals or customers are important, or when the names of departments or places are asked for, and where no subheadings are required.

Business organizations have frequently made the mistake of attempting to combine subject indexing with alphabetical indexing, but have found it to be impracticable because the subjects were found to require subheadings. Moreover, where attempts have also been made to substitute subject indexing for alphabetical arrangement, the subject method has also been found inadequate or too cumbersome, as the subjects either could not be standardized, or were too numerous, or changed too frequently.

Subject Filing

Subject indexing is the most difficult method of filing, and extensive and careful analysis is required to make such a filing department efficient. It should be used only where the activities of a business organization are divided into phases, districts, etc., such as develop in manufacturing plants, contractors' offices, with exporters, with railroads, in law offices, etc.

To begin with, only such subjects must be chosen as are used continually, both in conversation and departmental routine, throughout the organization. Standardization of subject is all-important. It must be properly classified and nothing must be left to guesswork.

The great danger in the installation of a subject index

lies in the possibility of making it too complicated, because of the necessity for cross-indexing.

In the average case the only cross-reference necessary, where one subject relates to another, is to take a blank piece of colored paper, note on it that subject "A" refers to subject "B" and file the blank sheet in either one of the two subjects. Instead of doing this, many business organizations have installed a numerical-subject index, with two or three separate cross-references, and these card index files contain almost every conceivable subject.

A large manufacturer had divided the numerical cross-index to the subject file into four different parts. One card index contained a record under folder number, a second an index by departmental subject, the third an outside or customers' subject index, and the fourth an auditors' or accounting index. The work of maintaining such an elaborate system was tremendous. The force in the filing department was considerably larger than necessary, and errors were the rule and not the exception. Three out of four of these separate records could have been eliminated, leaving only the general index by subject.

Geographical Filing

Indexing correspondence and other records under the name of the town or state will prove successful to any manufacturing or business organization with branches or activities scattered throughout the country, and with which sales or shipments are divided territorially.

Sales organizations especially find the geographical method efficient, because of the opportunity afforded of segregating reports, prospects, and correspondence for the attention of the salesmen assigned to certain parts of the country.

Filing records laid out geographically are often made to correspond with a map routing system, and are used by the

sales manager as a pulse by which he gauges sales conditions, or stimulates business through sales campaigns at certain times of the year.

In this system no cross-index is needed. Letters, or other papers, are simply laid out in the larger files under index "guides," which bear the name of the town or state, the folders containing the papers being filed alphabetically behind each town or state guide. By the application of color schemes, a geographical filing system can be made very simple, and the possibility of error greatly reduced.

Chronological Filing

The chronological arrangement (by days or months) may be used whenever records are to be handled from the standpoint of the date. If the date alone is important, it follows automatically that papers will be referred to by days or by months of the year. The follow-up or tickler file is an example of the chronological arrangement.

Here it might be well to call attention to the fact that while letters are often requested under "such and such a date," they must not of necessity be filed by date. Firms have often made this mistake and the result has been a great mass of letters accumulated under one date, making reference to a specific paper extremely difficult, because of the necessity of going through a large number of papers.

It is possible to combine the chronological and alphabetical systems, but in such cases the alphabetical is the main heading, the records being subdivided under days or months.

Simple chronological filing is employed where expiration dates, or mail follow-up systems (such as are used by mail-order houses) are used, or when following up prospective customers from the angle of quotations previously rendered.

The principle fault to be found with chronological filing is that too often a large quantity of papers are permitted

to accumulate under one date, resulting in considerable loss of time when referring to specific records. An important aim in all filing is to reduce the volume of papers filed behind a single guide, or in a single folder, to the smallest possible number, as it is only through the reduction of this bulk that speed in records can be realized.

Numerical Filing

The numerical system, while not the most difficult to install or maintain, nevertheless presents a difficult problem. It is easy for the executive to go astray because of the seeming simplicity and accuracy apparent in the first analysis. To assign a number to a customer, department, or individual seems, at first glance, to be an easy way out of all sorts of difficulties, and is often adopted in filing departments, both large and small.

Numbers should be used only where cross-reference is very extensive, as when combined with an alphabetic or subject index, or in cases where one complete unit is distributed or subdivided into many smaller parts, such as in manufacturing plants, law firms, or newspaper morgues. In these cases the job, client, or subject is given a number, and that number appears as an identification mark wherever these smaller units are collected, or reference is desired to any part of the main subject.

Numbers are also used in cases where the records are confidential, and are accessible only to department heads or executives. In such cases the account, job, or firm is identified throughout the office routine by the number only.

Extensive analysis is required to determine definitely whether it is absolutely necessary to add the number to a subject or alphabetical index, and because of the expense and supervision involved, the numerical cross-index system should only be adopted after careful consideration.

At one time business organizations installed a system wherein the records filed in the filing department, or kept in books in other parts of the office, were made to conform with the folio or account number in the ledger. But because of the great possibility of error in handling records so indexed, this method is rapidly being discarded, and these various records are being treated from their individual angle of reference or with regard to their relation to the other departments of the organization.

Revising and Correcting

Twenty per cent or so of the time of the head file clerk should be given to revision and correction of the files. This allows for one day per week, and two days at the end of the month. When the monthly folders are made out for new correspondence, special care should be taken to have them accurate.

Transferring and Destroying Old Records

At regular intervals the contents of the correspondence files should be removed to transfer cases to make room for current business. Firms generally prefer to do this at the end of the fiscal year, or semiannually. The time must be definitely fixed and the entire body of material transferred at one time. Sufficient equipment must be provided to take care of this.

The usual time for preserving general correspondence is five years—after that it is destroyed. Interdepartmental memoranda may usually be destroyed after one year; orders, and paid invoices, after three years; contracts and legal documents generally, after seven years; credit reports are, of course, kept indefinitely, and modified from time to time; data files also are constantly being renewed; or may be revised and enlarged.

Centralization

The ultimate development for the filing activity seems to be a centralized filing division, parallel, say, to the stenographic department and serving the whole business. This result has been reached in only a few concerns, but a large number of concerns are approaching it steadily. The advantages of the centralized department are:

1. It saves duplication of plant and labor.
2. It makes possible a better quality of labor and greater expertness in the staff.
3. It makes possible a wider use of filing resources.

With the exception of records on which clerical work—such as posting—is being continually expended, it is entirely practicable to group together all the papers and records of even a very large organization. This has recently been done, almost literally, in R. H. Macy and Company. The correspondence, the customers' records of various kinds, and many other sets of statistical information are brought together in what is known as the investigation department at the top of the building, in close proximity to the central transcribing room where the correspondence is written off from dictaphones.

The disadvantages of central filing are:

1. Physical difficulties obtain; it is inconvenient not to have the files connected with one department immediately at hand. This difficulty, however, may be overcome by a good distributing system. It involves, of course, a regular, frequent, and responsible messenger service. It may be noted in the above firm that the central department has a representative and a sort of distributing station on each floor. It is not necessary that the records be assembled physically in one place—merely that they shall be under active supervision of one central authority.

2. Another disadvantage is that different departments have different needs and may call for different systems of arrangement, etc. The answer to this is that an expert filing staff can handle even several systems more satisfactorily and economically than a large number of less trained people.

Here again, the Macy organization offers a useful example. The 30 or 40 clerks in the investigation department operate a large number of different indexes and systems, adjusted to the needs of the various departments, passing from one to another as may be needed.

Other large concerns in which centralization has been carried to a high degree are the Western Electric Company and the New York Telephone Company.

A third disadvantage not to be overlooked is fear of publicity as between individuals and departments and differences in point of view as to methods of conducting the business. This difficulty may be overcome, however, as in the case of the stenographic department, once the conception of the filing activity serving the entire organization has been grasped by the executive.

Any attempt at centralization involves, as a matter of course, certain requirements:*

1. A carefully drawn up or "standardized" set of instructions should be adopted in connection with the filing work.

2. The retaining of papers or letters in individual desk drawers should be eliminated.

3. The granting of personal compartments or "personal files" in the general filing department should be eliminated entirely, and all papers relating to the company's *general business* should be gathered together in one place, and, as far as possible, under one common index.

*The general case with regard to centralization has been well set forth by W. Herbert Gilley, Superintendent of the filing department of the Mutual Life Insurance Company in the July, 1918, number of *Filing*.

4. No individual except the file clerks should have access to the files. When papers or material are withdrawn a regular receipt form should be given, duly signed. This receipt or "out" card is usually filed in place of material withdrawn.

Here it is sufficient to say that systematic centralization increases largely the smooth and efficient operation of the filing activity of an organization, and broadens its scope very considerably. As to the cost, it is probably a conservative estimate to say that systematic and wise centralization means a total saving for the organization, counting salaries, supplies, floor space, and up-keep generally, of 40 per cent of what is now spent.

PART IV
THE CONTROL OF CORRESPONDENCE
AND RELATED ACTIVITIES



CHAPTER XV

STENOGRAPHIC DEPARTMENT—EQUIPMENT AND ORGANIZATION

Elements Necessary in Efficient Control

Adequate control of a department depends upon proper organization and supervision. The organization of the stenographic department embraces:

1. The location of stenographic department and desks.
2. The allotment of aisle and working space.
3. The location of files and similar equipment.
4. Provision for light, heat, and ventilation.
5. Arrangement of desk drawers and placing of accessories.
6. Adjustment of chairs, foot rests, etc.
7. Covering of machines.
8. Standardized forms.
9. Manual of instructions.

Supervision involves the use of methods necessary to keep the organization at work and authority to discipline the workers.

Methods of control, in turn, demand that two things be provided: First, the supervisor must have standards by which to compare and measure the output of the group, and of the individual. This enables him to judge of the general trend of the department's work and to see that the expected requirements of individuals are met in quantity of work. Secondly, the supervisor must be provided with reports whereby equipment and conditions can be inspected, and standards maintained. Good discipline involves the authority for enforcing orders, assigning work, seeing that rules and regulations are

carried out, and that instructions are given to stenographers regarding proper methods of work and procedure.

Location of the Department

In selecting a location for the stenographic department, due consideration should be given to the fact that typewriters are noisy machines. Therefore, they should be removed from the hearing of the other departments and executives, and yet the stenographers should not be so far away as to lose valuable time in going to and from the dictators' desks. To be sure, a suitable location must not be obtained at too great a sacrifice of light and ventilation, for both of these elements bear directly upon the efficiency of the workers, and should be studied carefully. The ideal location is a room in the northeast corner of the building with large windows to furnish the maximum amount of natural light. For dark days and evening work, semi-indirect lighting should be installed.

Heat, Ventilation, and Humidity

While the heating and the ventilation of an office are matters worth careful consideration, most offices still depend upon the simple method of using the window to bring about the conditions desired. Heaters are placed under the windows, with sufficient radiating surface to keep an even temperature in the coldest weather, and ventilators are made into the windows in such a way as to provide fresh air, and yet avoid drafts. This arrangement should, where possible, be supplemented with a system of fans by which the exhausted air is drawn out from the top of the room, and an adequate supply of fresh air is drawn in through the window ventilators, and so controlled as to bring the air down and deflect it just above the heads of the clerks.

The use of humidifiers is also to be recommended when necessary, although few offices have installed anything more

than the simplest form of apparatus. In fact the importance of this factor, as it bears upon the efficiency of the workers, is not generally realized. Going from a very warm room into the cold, damp air outside, tests one's resisting powers to colds and sickness, more than is generally realized. By equalizing as much as possible the atmospheric conditions inside, this risk can be avoided. One firm takes as its standard of humidity the atmosphere as it exists outdoors on a clear October day. This average is maintained by placing humidifiers on the heaters located under each window.

Reduction of Noise

A stenographic department in which two people cannot carry on a conversation in a normal tone of voice is too noisy. Quietness is directly connected with the maintenance of good discipline and the maximum degree of concentration. The constant hum of busy machines acts as a steady drain upon the nerve force of the stenographers. In most offices the noise is attacked at its source—the machine itself. By putting a felt pad an inch or more in thickness under each typewriter the sound waves are deadened before beginning their noisy journey throughout the room. The noise which escapes in spite of this precaution may be further reduced by covering the floors, ceilings, and walls with materials which “absorb” the reverberations to a large extent. For example, linoleum over a layer of wool felt may be used as a floor covering, and it is easily kept clean. To reduce the reverberating qualities of the ceiling, a thick layer of felt may be stretched over it. The appearance of the room is not marred if white muslin, which reflects the light well, is stretched over the felt.

Arrangement of Desks

The poor arrangement of desks and equipment often causes a department to seem overcrowded, whereas more care-

ful arrangement would give adequate working room in the same space. Hence the effective use of space in the stenographic department should be given close consideration.

When a stenographer cannot leave her desk without disturbing other workers something is wrong with the desk arrangement. It is difficult in this connection to lay down any general rules, but experience has shown that where desks are in rows there should be at least 40 inches of space between them. This gives adequate chair room and aisle space back of the chair. Aisles between rows of desks, where much traveling is done, should be at least three feet wide. Where the files are constantly used the working space in front should be about five feet. In the opinion of one office manager the floor area essential for highest efficiency is about 100 square feet for each individual. This includes space for desk, chair, aisle, and the room required for files and equipment.

Another frequent cause of overcrowding is a collection of heterogeneous and unstandardized equipment. Perhaps double typewriter desks are used when smaller desks would answer the purpose, or large and small tables and desks are mixed indiscriminately. Often in such cases the operator at the smaller desk may be in need of storage space, while the one at the larger table may not.

By lessening the causes of confusion the environment is made more congenial and the control of the force is more easily maintained. One manager, after studying conditions, decided that small tables for the typewriter with a large table at the side, the length of which was limited to the requirements of three typists, were most efficient for his particular purposes.

Selecting a Head Stenographer

As the work of training the girls and their immediate supervision fall upon the head stenographer, it is essential

that the person chosen for this position should not only be thoroughly conversant with all the details of stenographic work but should reveal marked executive ability as well. Therefore, four considerations should govern the office manager in the selection of a head stenographer who preferably should be a woman. These are:

1. Character and personality.
2. Knowledge of the concern's policies and organization.
3. Skill as a stenographer.
4. Ability to teach.

It should not be necessary for an established concern to go outside to find the right person. Usually some stenographer in their employ who is familiar with the ways of the many dictators, who has a knowledge of the details of the organization, and, what is equally important, whose tactful personality is such as to influence others to do their best, should be available in an organization of any size.

Selecting the Stenographic Force

The standards to be maintained and the complexity of the work to be done must, to a great extent, control the selection of the stenographic force. A company manufacturing and selling typewriters, of necessity demands a higher standard of work than an ordinary commercial house. While no definite rules can be laid down, the most obvious course is to "use what pays best"—only be sure that a mistake is not made in selecting cheap material simply because it is cheap. On the other hand, if an \$8 a week girl can turn out work that meets the requirements of a particular business, it is obviously poor policy to hire one at \$12 a week.

The qualification generally required seems to be experience, although even in this respect concerns differ. One will

consider only an applicant having several years' experience to her credit, while others prefer a girl with little or no training in other lines of business. A large New York company says: "Our best success has been obtained with stenographers who have had not more than two years' experience before coming to us." It is more difficult to overcome fixed habits of the trained girl than to develop comparatively untrained stenographers when the work is of an unusual character.

Points to Consider in the Selection of Stenographers

When selecting the personnel of the department and weighing the qualifications of one applicant against those of another the following points are worth consideration:

1. Education
 - (a) College
 - (b) High school (part time plan)
 - (c) Graded school
2. Technical training
 - (a) Business college
 - (b) "Picked up"
3. Experience in type of business
 - (a) Professional (legal, accounting, engineering, etc.)
 - (b) Commercial (retail, brokers, etc.)
 - (c) Industrial (factory, etc.)
 - (d) Transportation
 - (e) Financial (banking, exchange, insurance, etc.)
 - (f) Educational
4. Special training in stenographic essentials
 - (a) Grammar (based on answers to all questions during interview)
 - (b) Business forms
 - (c) Composition

- (d) Tabulation
- (e) Filing
- (f) Elementary computations
- 5. Personality
 - (a) Attractive
 - (b) Mediocre
- 6. General appearance
 - (a) Simplicity in dress
 - (b) Neatness
- 7. Characteristics
 - (a) Overconfident
 - (b) Extremely diffident

Testing the Applicant's Ability

A letter of medium difficulty dictated to the applicant should satisfy the head stenographer as to ability to take dictation and to transcribe notes, although an arrangement for a week's tryout on the actual work of the department is a fairer and more satisfactory test. A day or two on copy work will bring out typing defects due to carelessness, or to a heavy or erratic touch, while the girl's manner of adapting herself to the office routine and of handling its details will give the head stenographer an opportunity to judge as to capacity and general fitness.

Training Stenographers

If the test of an applicant's ability proves satisfactory, the period of training should begin at once. The head stenographer brings to the new employee's attention the necessity of mastering the office manual—a subject to be taken up in later chapters. She explains in detail the manner of keeping the work records, of checking up her daily progress, handling the equipment, interpreting what is meant by "quality of work," and the standards applied to the form and arrange-

ment of the letter. These also are matters to be discussed in following chapters.

This training is not accomplished in one day, but step by step—from addressing envelopes, filling in, etc., to copying lists of figures and names, form letters, statements, and manuscripts—which course enables the new girl to learn the technical terms of the business. Then comes dictation of a routine character, and, as knowledge and expertness warrant, assignments of work follow which demand judgment and technical correctness.

The training of a typist is along the same lines although more limited in scope.

Speed Classes

Some firms, with the endeavor to keep up the highest standard of stenographic output, have instituted "speed classes," which meet once a week at a stated hour (usually the last hour before closing time if work permits). The girls are given dictation embodying technical terms likely to be met with in the regular course of duties; the notes are read back by different members of the class; and the outlines of the more difficult words are written upon a blackboard. This is done for the purpose of inciting a general discussion in which all the girls are encouraged to take part.

To keep the enthusiasm of the force alive it is well to institute reviews and to offer occasional rewards to those attaining a certain degree of proficiency. A visit to the class, now and then, from the office manager or other executive, with a discussion of the stenographic policy of the concern, is of great assistance to the head stenographer in keeping up that interest on the part of the girls which alone can make the classes a real success. In this way each girl is made to feel that any special effort on her part is appreciated, and that a wider knowledge of the vocabulary pertaining to the various

branches of the business aids her in taking dictation and increases her chances of advancement. Experience has shown that speed classes are a big factor in keeping a stenographic force alert with a zest for the work.

Handling Special Problems

Other problems which indirectly bear upon the training or discipline of the force are those relating to overtime, punctuality, absence, dull periods, salary raising, and so on.

Overtime work is due to many causes and cannot be entirely eliminated from all businesses, yet it is generally conceded that it should be avoided so far as possible. Where overtime conditions are due to inefficient management, in the way of unequal distribution of work or like error, means can readily be found to correct it by the adoption of the work schedule and other records to be described later. Experience proves that employees accomplish more, in the long run, if the pressure of work is uniform and reasonable in amount, rather than if spasmodic—little today and perhaps overtime tomorrow. During dull periods it may often be better to give a few of the girls at a time a half day off, rather than “invent” work which is not necessary.

As regards punctuality and regularity of attendance there is little further to suggest than the method of strict accountability for time lost, i. e., holding employees to account by means of reports of daily attendance, showing the time they reach their desk. These reports are made out by the girls themselves and sent to the office manager for scrutiny and comment. Upon his attitude, in a large degree, depends the discipline maintained. A report which, when it merits attention, fails to inspire action on the part of an executive, is better not made, for any laxity shown by the office manager in matters of discipline will encourage, rather than deter, negligence in the employee.

The Salary Problem

In fixing and raising the salaries of stenographers and typists it is well to bear in mind that this question should not be treated as an "individual proposition," but as a matter of strictly business policy only, which is fair to all concerned. The question should be divested of all personal considerations. Every employee should be made to feel that his or her salary is based upon the services rendered and justice to all employees. A sound salary policy must be based on the four following guiding principles:

1. Loyalty and length of service.
2. Market value of services.
3. Comparative improvement in work over her previous records.
4. Improvement over the records of others doing similar work.

A policy such as this, backed by ready recognition of superior merit, without the demand for a raise coming first from the employee, will ensure a loyalty to the firm where other expedients breed disloyalty and discontent.

Having discussed the organization of the department from the viewpoints of layout and personnel, there remain to consider various details of equipment.

Position of Clock and Calendar

Every stenographic department needs to be equipped with a clock and a calendar. A clock is an especially important item of equipment where schedules, the time-standards of business, are understood and enforced. The activities of a well-managed stenographic department should be regulated by certain predetermined time-standards or schedules. If the employees are to keep to these schedules, a reliable timepiece must be in plain view. This is easily accomplished by putting

a large clock at the end of the room toward which the majority of the stenographers face. Under this clock, and large enough to be seen from every part of the room, a calendar should be placed. With these two guides time records can be made out and letters dated without constant reference on the part of the girls either to the head stenographer or to one another.

Use of Annunciators and Callaphones

To avoid the confusion and waste of time which frequently accompanies the announcement of assignments for dictation, annunciators and callaphones are frequently used. When a dictator wants a stenographer he presses a button. A white disc at once shows on the annunciator at the back of the head stenographer's desk. Noting which dictator has rung and what stenographer is free, she speaks into the callaphone instrument before her and says, "Miss Byer to Mr. Stotz, please." The sound intensifier, which is placed on the wall at the back of the room, repeats the message loud enough to be heard by everyone. The girl addressed answers the call and the others go on with their work.

Supplies and Surplus Machines

Details of equipment of minor importance are supplies and surplus machines. Much time may be wasted by running out of supplies or by the breakdown of a typewriter. A stock of supplies should always be on hand and accessible and, if the office is large enough, a boy should be kept to distribute them to workers as required. As for typewriters, it is advisable to keep on hand a spare machine which may be substituted for a defective machine. If repairs are to be made on the premises, a special room should be provided as a means of preventing the interruption of work. Some very large firms employ a man who devotes his whole time to repairs. Most

concerns, however, rely upon the service departments of the typewriter companies.

Special Equipment

As the needs of the stenographic departments vary with the nature of the business, it is impossible to cover all the special aids to, and equipment required, for good work. One firm furnishes dictionaries placed at convenient points for consultation; another provides a library containing books on English composition, grammar, and the like; while a third has a number of telephone extensions in the department—one for the head stenographer and others upon the desks of stenographers who must keep in touch with certain executives. In general, the above list covers the equipment which, in a sense, should be the common property of the department.

Neatness of Personal Equipment

Close study is constantly being made of the personal equipment required by the individual stenographer. Unless there is a place for everything and everything in its place, time is wasted and mistakes are made. An untidy desk top is the frequent cause of letters being mixed with carbon copies, delayed mailings, the omission of important enclosures, letters written on wrong letterheads, and many other avoidable errors. Lists should be made of the things each stenographer needs, in the way of equipment and stationery to be kept in her desk, and the drawers arranged accordingly. A good rule is that nothing should be kept on the desk top but the machine (see Figure 26) and at the back of a machine that useful typewriter accessory, a copy-holder.

Use of the Copy-holder

An indispensable typewriter accessory is a copy-holder. The earliest form of this device consisted of a small stand on

which the note-book was placed and held in position by means of an elastic band. The newest development, which is a good improvement over the old method, because it aids both accuracy and speed, is a device which is screwed to the desk behind

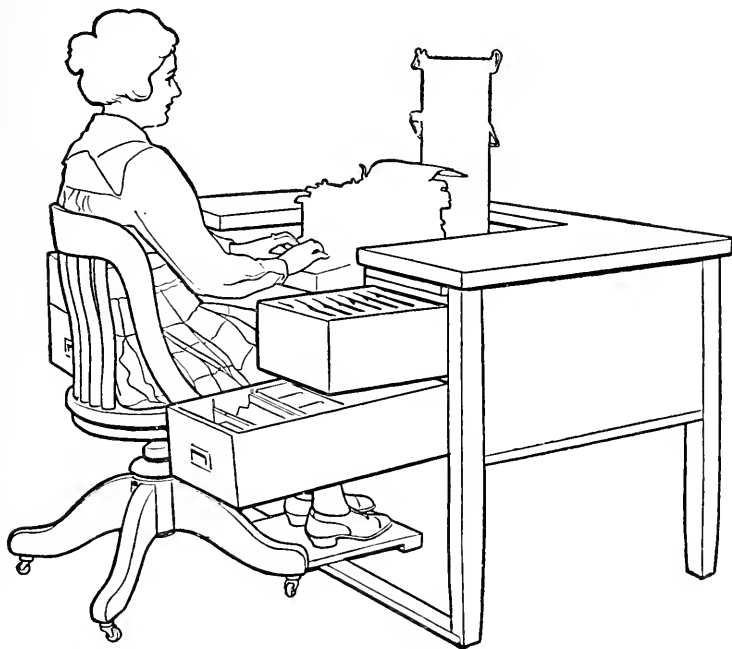


Figure 26. A Stenographic Desk Cleared for Action

With all papers and stationery stored in drawers.

the typewriter where it holds the note-book or the matter to be copied. By pressing a lever to the right of the keyboard, the copy is raised one, two, or three lines at a time as may be desired. A "line finder" also prevents the operator from skipping a line or two as she works. The device prevents eye strain because the copy is directly in front of the operator, both her eyes are equally distant from it, and she does not need to keep her head turned to one side as she

works. She is thus able to maintain a natural and easy posture.

Arrangement of Materials in Desk

The precise method of arranging individual equipment is usually left to each girl's fancy—which is not conducive to orderliness and economy of effort. The “layout” of the desk is well worth consideration with a view to determining the kind and quantity of materials and stationery required by each girl and the best method of arranging and storing this equipment in her desk. The supplies most frequently used should be placed where they can be most easily reached, the movement being from right to left; that is, working materials are taken from the right side of the desk and the finished work is placed on the left side of the desk. The following instructions as to the materials to be carried and their position in the desk are taken from the office manual of the Remington Typewriter Company, and cover all that needs to be said on this point:

Upper right-hand drawer:

1. Yellow sheets
2. Thin white paper for carbon copies
3. Interoffice letter-heads
4. Red seal letter-heads
5. Heavy white paper for long memos and second sheets
6. Supply of carbon
7. Special letter-heads
8. Telegram blanks
9. Interdepartment memos

Lower right-hand drawer:

1. Small envelopes
- No. 10 envelopes

2. Interdepartment messenger slips
Enclosure slips
Pyramid of pins
3. Erasers
Clips
Rubber bands
4. Well-sharpened pencils
5. 6 x 9 envelopes
Note-books

Left-hand drawer :

1. Finished work
2. Letters to be answered and other papers being used
in connection with work
3. Yellow and white carbon copies
4. Miscellaneous supplies and forms
Personal belongings
Cleaning outfit
Dust cloth

“Typewriter Covers. When not in use, fold covers neatly and place them behind machine. Be sure machines are covered before leaving at night. Nothing should be on top of desk. All papers should be in drawers provided for them with the exception of copy or note-book from which you are working.”

Posture of Stenographer at Desk

A final and by no means the least important consideration in helping to make the stenographer efficient is her position or posture at the desk. Self-starting machines, copy-holders, special stenographic desks—all came before the physical comfort of the operator was considered as she sat at her work. Attention is now being paid to this matter with the result that we have the adjustable chair, the knee brace, foot rest,

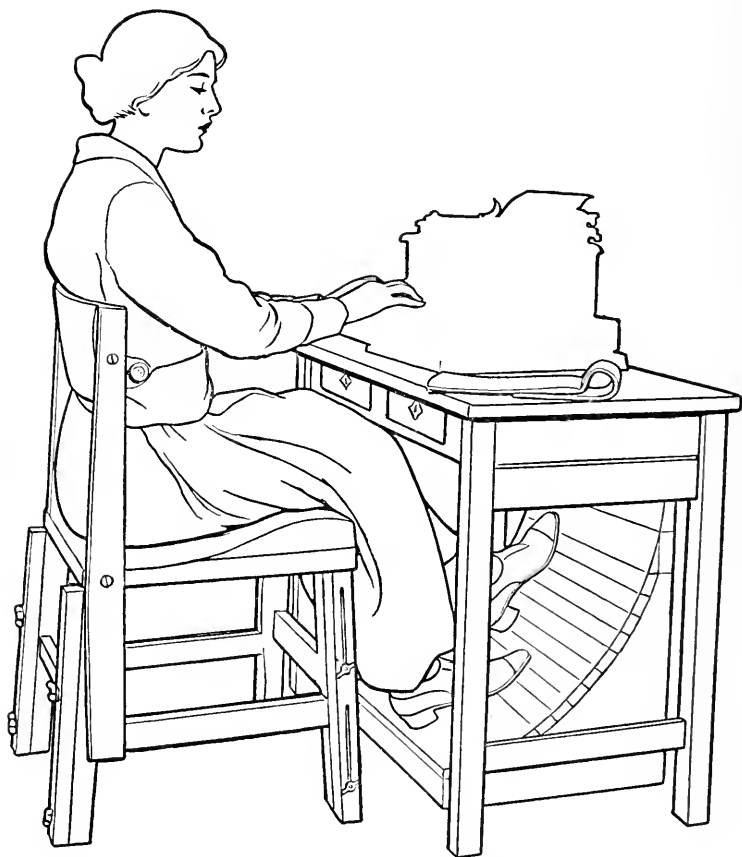


Figure 27. A Stenographic Desk with Special Foot Rest

This type of foot rest is designed to relieve fatigue.

and the adjustable raised desk for sitting or standing. One firm, for example, furnishes a special type of foot rest as shown in Figure 27. All of these things are added expense from the old point of view, but from the modern point of view the savings due to the reduction of fatigue has turned these extra outlays into investments.

Few people adopt, naturally, the most efficient ways of

doing things. Piano playing was taught for generations before the simple fact was discovered that the least fatiguing position at a piano is to hold the forearms and wrists in a horizontal position with the upper arms at an angle of 30 degrees. We seek the scientific method when training persons in most professional activities, such as surgery, music, and the arts, but in business thought is rarely given to the correct posture at a desk, or to the least fatiguing method of working. The supposition is that these things are naturally done in the best possible way. Yet investigation in the factory has, in recent years, shown that the efficiency of factory workers is greatly increased when their method of working is studied with a view to eliminating all useless motions and when they are taught to perform the necessary motions in the easiest possible way. These "motion studies" as they are called, are now being made in the office.

After experimenting with numbers of typists and studying the methods of the "speed artists," experts have found that typing, like piano playing, is done with the least effort when the operator's forearms and wrists are level, and the upper arms 30 degrees from the vertical, as shown in the illustrations. With this fact established the position of the machine and the position of the chair need to be carefully regulated. As a consequence, the old style typewriter desk and the regulation chair have had to be modified. The tendency of almost all typists is to get too close to the typewriter and to sit in too low a position for comfortable working. Such a position hampers the rapid manipulation of the keys.

Experiments made by the Remington Typewriter Company as to the best position of the typist, also prove that fatigue is greatly lessened when the sitting posture can occasionally be changed to a standing posture, as shown in Figure 29. The importance which is today attached to these seemingly unimportant matters is evidenced by the following in-

structions regarding the method of insuring the correct posture of the typist at her desk. These instructions are taken from the office manual of the Remington Typewriter Company and the positions described and recommended are illustrated in Figures 28a and b.

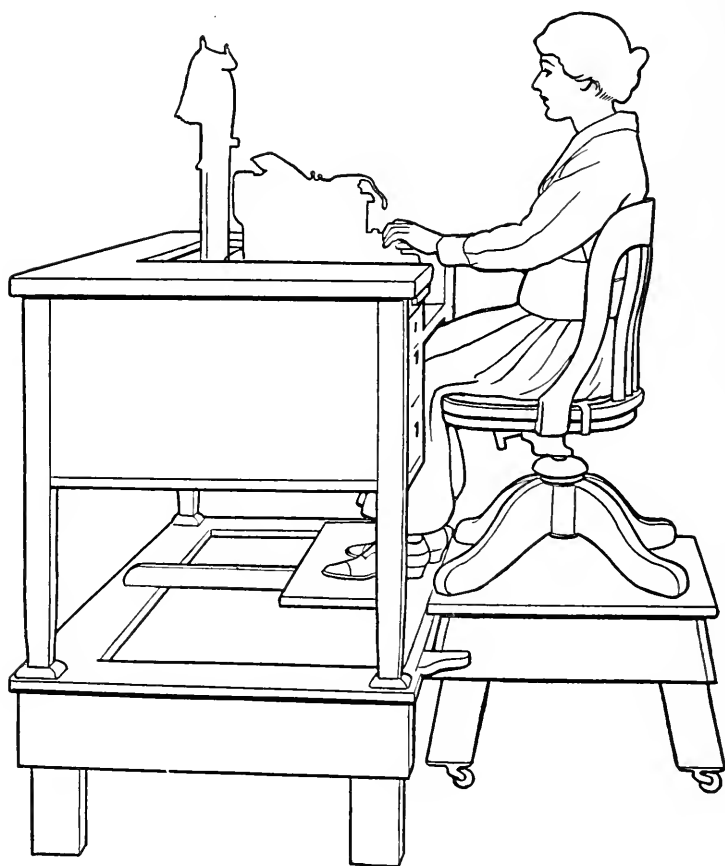


Figure 28. (a) Adjustable Desk—Stenographer Sitting

The desk and chair are placed on platforms so that the operator can work either in a sitting or standing posture, as she prefers.

INSTRUCTIONS FOR ADJUSTING POSITION OF TYPIST AT DESK

Making Adjustable Knee Guard

Make two end blocks 6 inches square and 1 inch thick to fasten to the sides of desk.

Cut square holes in the back of each of the blocks of proper size and depth to hold bolt-heads and prevent them from turning.

Make knee guard of $4 \times \frac{7}{8}$ inch stock, with two end pieces 6 inches long fastened at right angles to the main piece by dovetailing.

Cut slotted holes 3 inches long in each of the end pieces to make the guard adjustable.

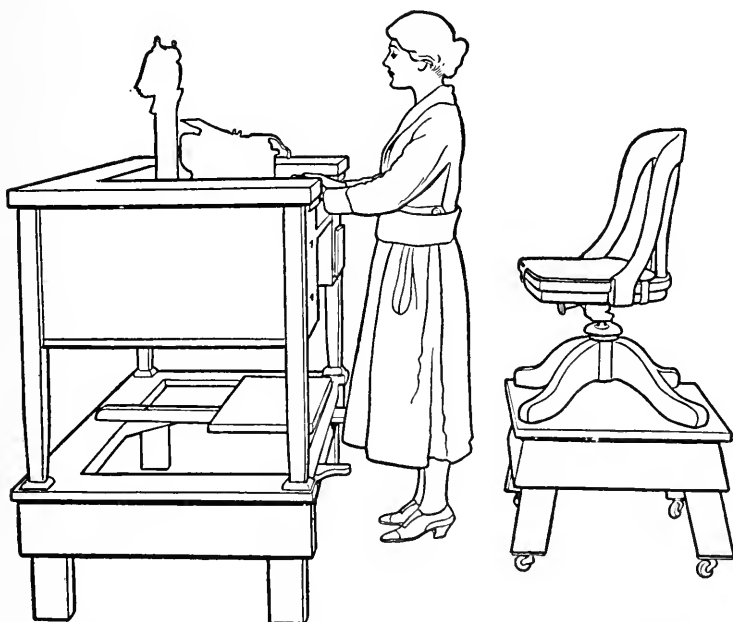


Figure 28. (b) Adjustable Desk—Stenographer Standing

To work standing for short periods of time is found to relieve fatigue. With the chair and desk raised, as shown above, the change from a sitting posture can be made almost instantly.

Fasten the knee guard to the end blocks with $\frac{1}{2}$ inch square-headed bolts supplied with washers and wing nuts.

Fixing Position of Operator and Knee Guard

Loosen wing nuts and push guard as far back as possible. Have operator sit in proper position with arms and wrists level, upper arm 30 degrees from vertical and back resting lightly against chair, move guard forward until it touches operator's knees and tighten wing nuts.

Making Adjustable Foot Rest

Make a foot rest of $\frac{1}{2}$ inch stock 12 inches square.

Fasten a cleat 2 inches wide, to and flush with, the back edge, of thickness to raise the foot rest to the height required by the operator. (Operator should always wear heels of same height, preferably low heels. A change in the height of heels would make it necessary to change height of foot rest.)

Bore a series of holes parallel to and near each side of the foot rest.

Make a strip of wood to fit between the inside edge of front legs of desk and attach two metal strips at each end to form guides to hold the strip to the desk legs.

Fasten two pegs to the strip centered between the desk legs, at proper distance apart to fit the holes in the foot rest.

When required height is greater than the thickness of strip between front legs of desk build up with cleats under foot rest until it is level.

Fixing Position of Foot Rest

Place operator's feet in proper position on the foot rest, by disengaging it from the pegs, moving it forward or backward, and engaging the pair of holes nearest to the pegs when the foot rest is squarely under operator's feet.

INSTRUCTIONS FOR RAISING DESK SO THAT TYPIST CAN ALTERNATELY SIT AND STAND

Fixed Quantities

Efficiency stenographic desk with top of typewriter bed $21\frac{1}{4}$ inches from floor.

One felt pad under typewriter (when new $\frac{3}{4}$ inch thick).

Front of base of typewriter placed even with front edge of desk.

Swivel chair which can be turned up or down by hand and fixed at any desired height by tightening set screw, having rigid back braced to sides of seat and made to support operator's back and shoulders.

Measuring Operator

Have operator sit back in chair as far as possible.

Place fingers on the second bank of keys, move chair back and forth until upper arm is 30 degrees from vertical (measuring with triangle).

Adjust height of chair until operator reaches the following position:

Forearm level

Wrist level

Hand level

If adjusting of chair has changed the angle of the upper arm from 30 degrees, move chair back and forth until angle is correct.

Measure distance from front edge of typewriter bed to back of chair at the level of top of typewriter bed, 17 inches.

Place support under feet (keeping heels and toes level), and raise until the leg above knee is level and there is no pressure of front edge of chair against leg.

Measure height of front edge of chair from floor, 18 inches.

Measure height of support under feet, $2\frac{1}{2}$ inches.

With operator sitting in chair and arms in position indicated above, measure distance from point of elbow to floor, 27 inches.

Have operator stand up with arms in same position and measure distance from point of elbow to floor, 41 inches.

Subtract and get difference between sitting and standing position, 14 inches.

Building Platforms for Chair

The difference between sitting and standing (14 inches) plus the height of the foot stool as arrived at above ($2\frac{1}{2}$ inches) will be the height of the chair platform ($16\frac{1}{2}$ inches).

By turning the swivel, lower the seat of the chair the difference between the height of the casters (2 inches) and the height of the foot rest ($2\frac{1}{2}$ inches).

Build the platform just large enough to take the base of the chair (23 x 23 inches) and the legs spread so that it will not upset if the operator should sit on the edge of the chair.

Bore holes in top of platform the proper size to allow casters to fit into them. When lifted up straight, the casters should come out of the holes easily but when chair is pushed horizontally, it should take the platform with it.

Casters on the platform should work very easily so that the operator can mount platform, sit in the chair, grasp desk, and pull herself closer to it.

For Desk

Connect the two sides of the platform with a guard to keep the chair platform the proper distance from desk, i. e., from back of chair to front edge of typewriter bed should measure 17 inches.

Attach guides to the guard to guide chair platform to proper position when operator pulls chair up to desk.

Make the top of the guard $\frac{7}{8}$ inch below the top of the chair platform.

Fasten a foot rest to the top of the guard made of a board $\frac{7}{8}$ inch thick by 12 inches wide and 23 inches long, with its front edge flush with the front edge of the guard.

Support the foot rest by a brace connecting the center of the guard with the center of the back of the desk platform.

CHAPTER XVI

STANDARDIZATION OF STENOGRAPHIC WORK

Differentiation of Stenographic Department

The evolution of stenography as a highly specialized employment is in harmony with the development of industrial specialization in general. The early cobbler made a whole shoe whereas today the shoe factory divides the making of a shoe into 150 operations and assigns each job to a group of workers. Similarly, many distinct branches of clerical employment have gradually evolved, one by one, out of the general mass of office work. A few years ago every clerk was expected to be a correspondent, a bookkeeper, and a general detail office man. Bookkeeping was the first to break away from the general mass. Then the work of correspondence began to be divided into a number of separate jobs. Today we find the miscellaneous mass of work known as "office detail" coalescing into separate departments or activities—such as the messenger service, the addressograph and multigraph work, and the like.

Specialization in the Correspondence Department

The term "correspondence" covers a large number of activities. For this reason many concerns, while calling the department which dictates and cares for the composition, writing, mailing, and filing of letters, the "correspondence department," still discriminate between these activities, finding that the greater efficiency lies in separating them, wherever practicable, and allotting them to specialized employees. In addition many progressive businesses, in which office work constitutes the main activity, distinguish between planning and

performing. Just as factories find it more efficient to separate the engineering and other planning work from the details of shop operations, so office managers are beginning to recognize the advantage of providing separate departments for thinking and planning and for doing.

The production of a firm's letters, like the making of its goods, must be first "thought out," their structure planned, and manufacture provided for. The ability to compose a letter is in no way dependent upon the skill required to write shorthand or to transcribe from notes or from a dictaphone. Therefore, as soon as a business is large enough, it should begin to divide the work of correspondence among employees whose whole time is given to the branch of work for which they have been specially trained.

Disadvantages of Separate Stenographic Force for Each Department

In those offices where the clerical force is recruited as the need of different departments seems to require, without an investigation of the nature of the work or any definite plan to cope with it, much overlapping of work and duties is usually the result. In many businesses, for example, it is the practice to supply each department with its own stenographic and clerical service. As the natural tendency then is for a department to measure its necessities by maximum rather than minimum requirements, most organizations are oversupplied with help during normal periods. Each executive feels that the surplus help will be needed again in a short time and he naturally strives to keep the force busy by providing it with clerical work as a "fill-in." How demoralizing this procedure may be to the discipline of the office organization is illustrated by the experience of a large concern which left the "office management" in the hands of the various department heads.

Disastrous Results of Independent Control

With no co-ordinating authority over the stenographic and clerical help, the work necessarily became unevenly distributed. Executives had become imbued with the idea that the routine of their particular department was more difficult than that of any other. This led to widespread discontent among employees, for some were overworked while others were comparatively idle; yet they received either the same wage or, as frequently happened, the clerk doing the least work was drawing the most pay. One stenographer, having perhaps more work than she could cope with and seeing another idle, would complain of unfair treatment. Others doing good work and getting \$12 or \$14 a week felt the injustice of a situation which gave \$20 to an employee who, for want of sufficient work, pretended to be occupied.

The investigation also showed that letters were dictated according to the whim or mood of the dictator and were frequently held over from day to day, because some executive preferred to wait for the return of a regular stenographer who was absent, rather than to accept a substitute. Also, the capacity and skill of stenographers and typists varied greatly and executives had time neither to select carefully nor to train properly. The letters turned out varied in quality and form, and were not always to the credit of so large a company.

Such were the chief disadvantages of the existing system. After making an analysis of function and duties the company decided that these inefficiencies were largely the result of the "scattered" type of stenographic and clerical control, and that if conditions were to be improved the centralized form of organization would have to be adopted.

Advantages of Central Control

The advantages of centralization consist (1) in correcting maladjustments between the number of employees and the

work to be done; (2) in facilitating the adoption of standards; and (3) in making possible adequate inspection and supervision. Instead of the surplus labor being scattered among many departments, it is gathered into one central department where the combined surplus of all departments can either be fully utilized or dispensed with if not required.

The first fruit of central control is either to make possible a reduction in the number of employees while still doing the same amount of work, or to undertake more work with the same office force. If any department has an unusually heavy schedule, it can be given extra aid by using workers who are not busily employed, or whose work is not immediately pressing.

The second fruit is concentration of effort. By separating the stenographic from the clerical work, employees are given tasks for which they are best fitted. This not only increases the efficiency of the workers but separates the higher paid from the lower paid form of employment. Routine clerks receive, as a rule, not more than half the salary of thoroughly competent stenographers.

A third advantage of central control is that work can be distributed equally and all employees treated alike in matters of salaries and training. All are judged by the same standards and checked by the same central authority. If the stenographic work happens to be light for a period, employees share alike in this respite from labor.

Chief Functions of Stenographic Department

The most important function of the stenographic department is to turn out perfect letters. A business impresses others with the "personal appearance" of its letters much the same as an individual makes a good or bad impression with his clothes. To make the right impression a letter must be neat, symmetrically arranged, and letter-perfect. These fea-

tures depend upon the careful training and adequate supervision of the office force. Smudged, poorly arranged, misspelled letters are a handicap to a concern, and will seriously damage any firm's business reputation in time. On the other hand, the output of the stenographic department, if it functions properly, should not only be above criticism but the letters should strengthen the message they bear by the neatness and perfection of their appearance.

Testing the Department's Efficiency

The weak spot in a poorly organized stenographic department can be uncovered by an investigation designed to answer the following questions. If the majority of the answers are in the affirmative it is safe to assert that the department is badly in need of reorganization; if the replies are negative in character the department may be considered to be efficient.

1. Is the cost of the stenographic and copying work excessive?
2. Is there a surplus of stenographers?
3. Is the work unequally distributed among the workers?
4. Do the workers waste their time?
5. Are the wages paid inconsistent with service rendered?
6. Is there a standard of quality for dictators as well as for stenographers?
7. Do noises and other disturbances interfere with good work?
8. Is work held over by executives and other dictators for special or "preferred" employees?
9. Are the stenographers and copiers poorly trained?
10. Is regular and competent inspection of work provided?

After investigating and finding that the answers to most of the above questions were in the affirmative, one small concern decided to change its whole system of stenographic service, with the result that within five months the pay-roll was cut one-third and the average cost per line on dictated and copied matter was reduced 18 and 13 per cent respectively.

Efficiency a Thing of Slow Growth

Not every change, however, will give such rapid results as these, nor is reduction in production cost the only end in view. A business organization, like every other living thing, is of slow growth. Frequent transplanting is dangerous and scientific pruning is the natural and profitable method of perfecting it after the right plan has been adopted and set to growing. Fundamental changes, therefore, cannot be made over night. If disruption and retarded growth are to be avoided, change should be made only after careful thought, planning, and preparation; and the bigger the office the greater becomes the necessity for this sort of preliminary work. Months and even years are taken by some firms in carrying out schemes of reorganization, yet time is saved in the long run.

Standards of Work and Training

Standards of quality and style can only be set and maintained when the conditions of dictation are brought under the control of some directing authority, when stenographers are carefully trained, and when standards of performance are insisted upon. After rules pertaining to the form and style of letters are once formulated and adopted the executive's or correspondent's dictation can be watched and controlled.

As discussed in the preceding chapter, employment and training of stenographers should be put under the charge of a head stenographer, selected for her special fitness for the position. Such an executive can train better stenographers

at less cost than is possible where their development is left to department heads. Under the old method stenographers become accustomed to the peculiarities of one dictator and so gradually lose their speed. Under the direction of a head stenographer, and a plan whereby they take dictation from different men and upon a variety of subjects, their speed is not only maintained but also increased while the individual's conception of the business is broadened as well.

Not until all stenographers begin to work under competent direction and feel the pressure and stimulus of comparisons of performances can it be said that a central control exists. The principal work to be done, therefore, in forming a stenographic department is the setting of standards whereby measurements of work can be made and operations controlled. When sufficient standards have been formulated to insure a sound basis for judging the efficiency of the employees, it is then time to give attention to the room or department in which the operators are to work.

Procedure in Adopting Standards

Before standards can be adopted, a thorough analysis of functions and duties must be made. Such a study should disclose which work is of a routine character and which cannot be reduced to routine. It is obviously easier and more practicable to select first for standardization those tasks and operations which recur most frequently. In stenographic work the most frequently recurring activities are obviously the taking of dictation and the transcribing of notes.

Each dictator has certain methods of procedure. For example, he uses certain styles of salutation and complimentary closing. The stenographer numbers the pages of her notebook, enters the dates of dictation and of transcription, cancels the notes, identifies the letters which accompany the notes—all according to a method of her own. Finally, between

these activities of the dictator and the stenographer lies a field which may belong to either. Who, for instance, is to be responsible for punctuation, paragraphing, date, writing of figures, etc.?

In selecting the point of attack for the setting of the first standards in dictation, a very slight consideration of the situation shows that materials are more easily handled than methods; that methods are more amenable to standardization than persons and human relations; and finally that the employee who is subject to the commands of superiors and whose work is of a routine character is more open to suggestions pertaining to the adoption of standards than the executive to whom is left the initiative in matters of dictation as well as other things. Therefore, the first thing to be standardized should obviously be the form of the letter itself.

Procedure as Applied to Standardizing the Letter

Most businesses have their own peculiar stationery requirements and usually good reasons underlie the selection of certain sizes of letter-heads, envelopes, interdepartmental memo slips, and the like, as well as the use of a standard imprint. However, standardization usually stops here and the form in which a letter is written is left to the vicissitudes of individual caprice.

The standardization of the typewritten matter itself eliminates the element of caprice. But since dictators and stenographers have their own preferences it is well to consult all persons concerned as soon as a new method is considered and before it has even been proposed for adoption. This permits each interested person to register his or her suggestions and recommendations before the standards have been reduced to instructions. If, after discussion, an objection is raised by a minority, it is well to ask the objectors to waive their opinions in behalf of the general good.

A similar method should be followed when it comes to putting the description of the new standards into permanent written instructions. To make sure that everyone understands the instructions, they should be submitted for criticism to the stenographers and dictators interested. This may mean changes, but when it is considered how minute the details are that must be covered and the number of variables that must be eliminated before the simplest operation can be standardized, it is seen how carefully the work must be done if the instructions are to be carried out understandingly by the stenographers and typists. When the instructions are finally completed, a copy is given to each person interested and carefully explained. From each dictator, as the copy is handed to him, a promise is exacted that he will conform to all instructions and waive all individual preferences in the matter.

Points of Letter to be Standardized

The points to consider in standardizing the form of letters are as follows:

1. Date
2. Subject
3. Address
4. Salutation
5. Line spacing
6. Paragraphs
7. Sentences
8. Margins
9. Numbers
10. Quotations
11. Signature and complimentary close
12. Second sheet headings
13. Identifying initials
14. Marking carbon copies

The envelope and certain enclosures should be included in the scheme of standardization. The envelopes must be considered from the points of view of:

1. Size
2. Addressing
3. Return envelopes, when and how to use

The standardization of enclosures embraces the size of:

1. Order blanks
2. Circulars, booklets, etc.

The natural method of developing standards is, as has been said, to start with that activity which has the largest number of constant factors. This we found to be dictation and the letter form. By adopting this line of procedure, the germ of efficiency is introduced into the heart of the problem without causing unnecessary commotion or disturbance. The advantages of uniform practice in the form of the letter are readily recognized and usually accepted without opposition. This makes progress toward the second step much easier, since both the dictator and stenographer know that the letter, the common goal of both, is standardized in form and beyond the influence of their whims.

In taking the second step the office manager has two alternatives. He may attack the methods of the dictator in giving, or the methods of the stenographer in taking, dictation. Experience advises the latter, leaving the dictator's methods alone until the departmental activities have been standardized generally. Conditions will then force a natural compliance with such rules and regulations as may be found necessary to improve the methods of executives.

Responsibility for Punctuation—Errors, etc.

The work of the stenographer is commonly divided into four main activities:

1. Taking dictation.
2. Transcribing.
3. Copying.
4. Preparing letters, copies, etc., either for mailing or for the files.

When the duties of the stenographer have been classified as above, it is not always easy to draw the line where her responsibility actually begins and that of the dictator ends, or where the mail clerk's and file clerk's responsibilities begin and those of the stenographer leave off. Beginning with the taking of dictation the question at once arises, who shall be responsible for the punctuation, paragraphing, name, dates, and figures? The answer is obviously that they are part of the composition necessary to express the meaning of the dictator and he should be responsible. Therefore, the first rule should read: "Correspondent dictates punctuation, paragraph, etc."

But this rule alone will not always protect the stenographer when poor judgment is used. To place responsibility for such details as these is one of the chief reasons for written standard instructions. While no competent stenographer would let mistakes which she catches in her notes, pass unchallenged, nevertheless no just method of comparing efficiency throughout the department can be established if girls are required to take the responsibility for errors which are made by others.

To insure against any injustice, this rule of dictation should be supplemented by the provision of a "confirmation slip" which when signed by the dictator makes him responsible for the punctuation, etc., of each batch of letters. This slip accompanies the papers and is used by the head stenographer when inspecting the transcribed letters of the various stenographers.

Identification of Papers

Besides taking notes during dictation the stenographer is given charge of important papers—usually the original—with which a copy of the dictation is filed. A simple method of identifying them is to number each letter and note-book page as the dictation is taken down. In case the dictator uses a phonograph he numbers the letters and the identifying space on the phonograph slip which accompanies each cylinder.

Points to be Standardized in Typing Letters

The stenographer is now ready to type the letter and the standardization of this work covers the following points:

1. Carbon copies.
2. Carbon paper.
3. Inserting.
4. Erasing.
5. Underscoring.
6. Estimating length of letters.
7. Telegrams.
8. Pinning and delivering transcribed letters.
9. Typing envelopes.

Each of these points will be separately considered.

Carbon Copies

Typists should be taught four points about carbon copies:

1. The number required.
2. Purposes of colored copies.
3. Aids in economical use.
4. Methods of marking copies for distribution among persons interested.

Assuming that the size of carbons is the same as that of the letter-head their use can now be standardized. For example,

the rules based on the above mentioned points may be as given below :

1. Two carbon copies are required when letters are to be filed—the first to be filed with the original papers and the second under a subject classification.
2. Colors are used to show *where* the carbons are to be filed, i. e., white with original, pink with sales, etc.
3. Economy may be effected on two-page letters by writing on the back of the carbon copies.
4. Carbons which must be sent to individuals should be treated as follows:
 - (a) Take letter out of machine.
 - (b) Lay aside the letter-head and the first sheet of carbon.
 - (c) Put the other copies back in the machine and write as follows at top of sheet:

Copy to Mr. _____

- (d) Put a check mark after the name of the person on the copy he is to receive. This makes it unnecessary to address and attach interdepartmental memoranda.
- (e) The following description will aid the typist in selecting persons to whom copies are to be sent:

Comptroller's department—copies of all letters authorizing expenditures, unusual transactions, salary changes, or changes in salesmen's drawing accounts.

District sales manager—copies of letters sent to district offices.

Office manager—copies of all letters about leases and office rentals.

Branch managers—copies of all letters to salesmen or employees in their offices.

Carbon Paper

Typists should be taught to select the proper kind of carbon paper for the number of copies required. Many suggestions covering the use of carbon can be given, such as: "Wrinkled carbons spoil the copy." "Turn frequently and avoid wearing out in spots." "When inserting a carbon between sheets of paper, place it half an inch from the top and side of the sheet of paper. This method enables you to hold the paper with the left hand and pull out the carbon with the right." "When erasing over carbon place a blotter between the sheet being erased and the carbon. This prevents the carbon from smudging and from being worn out in spots. A pencil eraser used to take off the first coat and a typewriter rubber used afterward makes a clean erasure." "When underscoring two or more characters, always lock the shift key. Then, while striking the underscore, run ribbon along by turning the ribbon spool crank." Many helpful hints of the above nature, which may well be incorporated in the rules for standardizing the office routine, are to be found in booklets published by the various typewriter and phonograph companies.

Appearance and Form of Letters

A letter should have all the attractive elements of a good advertisement. It is obviously poor policy for an executive to devote his best efforts to the composition of a forceful letter and then permit its appearance and legibility to be marred

by slovenly typing. G. B. Hotchkiss writes in "Business Correspondence":

Everything that enters the letter should be chosen because it will be most likely to appeal to the reader and impress him. Unless you write the letter in this way, you are in the position of a wireless operator whose instrument is out of tune with that of the receiving station. You must tune up with it, adjust it, or the message will never reach its destination (the impression on the reader) and can produce no results. . . . When a man is trying to get money out of us in one way or another, we do not spend any great amount of time and energy in trying to catch his ideas and feelings. He must come to us and meet us on our own level, not his own.

Too often are the important details upon which the appearance of the letter depends left to the discretion of the stenographer whose ideal is frequently to crowd into a given space as much as possible. If the initial impression made by the appearance of the letter is one to prompt the reader to a closer examination of the "story" and tempt him to accept the conclusions of the writer, attention must be paid to its arrangement and form.

Two practical elements enter into the form or proper balance of a letter. One is the emphasis that the eye always gives to the upper half of the page rather than the lower part. Thus a letter that is exactly balanced by having the same amount of material above and below the mathematical center of the page does not appear to be well balanced. Another is the pleasing effect produced when a figure of any kind is constructed so that the width and length are in the ratio of 3 to 5. If a typed sheet is arranged with the width very much longer or shorter than the length, the letter appears "out of balance." In this connection the paragraph plays an important part. A little study may show that a shifting of paragraphs adds to the general effect through an artistic subdivision of the space into symmetrical parts, without detracting from the meaning:

also that the division of a long paragraph, or the union of shorter ones, will rarely interfere with the logic of the composition.

Rules for Form of Letters

While the order of the paragraphs and their length depends upon the dictator's method of composition, nevertheless stenographers may be instructed in the principles and so guided by directions that satisfactory results may be obtained. First among such instructions are those pertaining to the length of a letter. In the case of a short letter care should be taken to center the body of the letter accurately; that is, the typewritten matter should be so adjusted that the white space above and below is approximately equal. With this general effect in mind and realizing that after all, much depends upon the stenographer's judgment, some office manuals lay down specific rules covering the position of the date, subject, address, etc.

One company, under the heading "Form of Letters" instructs its typists as follows:

Write the date about three spaces below the printed name of city, except in short letters, when it may be placed lower.

Three spaces below the date line write the *subject* of the letter.

The number of spaces between the subject and the first line of the address depends upon the length of the letter to be written. If the address consists of two lines, the second line begins at 15 (referring to the index scale on the typewriter); if it consists of three lines, the second line begins at 10 and the third at 15. If a letter is addressed to a firm and intended for the attention of an individual, write on same line as salutation beginning "Attention" at 35 on the scale or farther to the left, depending on the length of the name.

The spaces between lines may be single or double, but preferably double; if single, there should be double spaces between paragraphs.

Paragraphs should begin at 15 on the scale.

Sentences should be followed by two spaces. There should be two spaces after the colon and one space after a comma or semicolon.

The margins or blank space around the typed matter should be the same. Try to get as uniform a margin as possible on the right side, but divide words only between syllables.

When a paragraph is quoted in the body of a letter, both right and left margins must be indented five spaces farther than the regular paragraphs. Quotations are to be single spaced. Thus when an original letter is quoted in a follow-up letter, no quotation marks are required. Its arrangement sets it off as a quotation.

The same care of arrangement should be given to letters. At left margin write the name of the office, company, or person addressed. Three spaces to the right write the number of the page and at the end of the line indicate date in figures—thus 5/24/18. There should be two double spaces between the heading and the body of the letter.

The complimentary close and signature, unless otherwise instructed, will be:

Yours very truly,

The Standard Typewriter Company,
John J. Johnson,
Vice-President.

To identify the dictator and transcriber, write at the left margin of the letter their initials, thus: ABC:E.

Subject Title of Letter

Reference is made in the preceding section to the "subject" title of the letter.

The advantage of giving all letters a subject title is generally recognized. It aids the recipient to ascertain the purpose of the correspondence at a glance and so prepares his mind for the discussion that follows. It also makes it easy to locate originals and copies in the files. If a letter comes to the typing department without a subject heading, instructions should be given to the typist to furnish one if the context is

evident or to consult the head stenographer. If the latter sees fit, the letter may be referred to the dictator.

Standard Form of Letters

As a further aid to the stenographer and the dictator in grasping the standard form of letters, a model copy of a letter to the public and a letter to executive offices and other branches are furnished by the company above mentioned to each employee in the department. These letters may then be kept by each individual in a convenient place, where they can be referred to without loss of time until thoroughly familiar with all their points of form and style. The following are specimen letters:

Executive Offices
STANDARD TYPEWRITER COMPANY

New York, N. Y., November 27, 1918.

FORM OF LETTER TO
EXECUTIVE OFFICES AND
OTHER BRANCHES
A B C
November 24.

EXECUTIVE OFFICES: Attention of Mr. Bruce.

This letter will hereafter be the standard form to be used by all branch offices when writing to the Executive Offices and to other branches.

For the sake of uniformity and ready reference, all of our letters should show, two spaces under the date line, the subject of the letter. If your letter is a reply, you should show, one space below the title, the initials of the writer of the letter to which reply is being made; and, one space below that, the date of the letter.

Cut out of the body of the letter all unnecessary words, such as, "Your favor of the 28th instant in regard to headings of letters was duly received," etc.

Only one subject should be covered in each letter. Make your letters brief and to the point.

Albany Office,

(Signed)

ABC:D

Manager.

Executive Offices
STANDARD TYPEWRITER COMPANY

New York, N. Y., November 27, 1918.

FORM OF LETTER TO
THE PUBLIC

UNITED STATES STEEL CORPORATION,
120 Broadway,
New York City.

DEAR SIRs:

Attention of Mr. Hancock.

Uniformity in a business letter pleases the eye, compels attention and commands the admiration of the recipient. Uniformity is not difficult to secure. It depends upon two things: First, regularity of indentations; second, mechanical setting of the typewriter carriage.

This letter is a model of correct set-up for our letters. It will hereafter be the standard form for our entire organization, except in writing to the Executive Offices and other branches, when the attached form is to be used.

In order to produce a letter similar to this standard form, set left-side guide one-eighth of an inch beyond the cylinder; set marginal stops at 5 and 65; set self starter stops at 10, 15, 25, 35 and 45; center subject under date.

Yours very truly,

Standard Typewriter Company

(Signed)

ABC:D

Vice-President.

Typing Interdepartmental Letters and Other Messages

Letters and other messages which go to branch houses, interdepartmental messages, envelopes, cablegrams, and tele-

grams need special rules to cover them. While brevity should not degenerate into obscurity and rudeness, it should, nevertheless, be the principle guiding the make-up of these messages. The standardization of form and procedure in handling such letters is covered by the following rules taken from the office manual previously referred to:

1. Interdepartmental memoranda to branch offices, factories and employees should have special headings indicating matter. If the letter, etc., is in reply to another, place the initials of the writer under the subject and, one space below, the date of the letter, as follows:

In re: COMPLAINTS NON-DELIVERY OF MATERIALS

June 20, 1918

J. G. J.

June 19

The use of the subject heading, as above, eliminates the necessity of the usually long introductory sentence—"Referring to your letter of the 19th instant by J. G. Johnson pertaining to the non-delivery of buffing materials, etc."

2. Envelopes to the public should be addressed with double spacing and in three lines or more, each line beginning ten spaces to the right of the preceding line. Do not omit street address if one is given, if not write city and state on separate lines. Do not abbreviate anything except the state. If the letter is to be called to the special attention of some person, put that person's name in the lower left corner.

3. When a letter consists of one sheet only, use a No. 6 $\frac{3}{4}$ envelope; if more than one sheet or enclosure, use a No. 10 envelope.

4. Where all the outgoing mail to each branch, etc., is sent in a common envelope, the form of address may be as follows:

Mr. Henry Brown,
Cleveland Office.

Or, if the address pertains to interdepartmental memoranda, there should be only the name of the person addressed, together with the department, section, or division. The following form is one in common use:

INTERDEPARTMENTAL MEMO

Date December 3, 1918.

HEADINGS OF MEMOS

A B C

December 2

TO CENTRAL DEPARTMENT:

All memos must bear subjects in capitals. If a memo is a reply, one space below the subject and centered under it, place the initials of the writer of the memo being replied to, and one space below that, the date of his memo.

Short memos are written on this form, but long memos are put on full letter-page size form.

All signatures should bear last name in full, thus enabling quick recognition of the sender.

Signature (with last name in full)

ABC:D

Standardization of Telegrams and Cablegrams

The procedure to be followed in sending telegrams and cablegrams should be clearly described by giving blanks to be used, the number of copies to be made and their disposition, the method of typing figures and the like, the use of the private code and of the day and night letters, and the cost of sending telegrams between various points most frequently telegraphed to. Definite rules should be laid down for the typing and handling of cablegrams, since mistakes are usually costly. The subject is covered by the following rules:

1. Type the message in code language whenever possible, using code address; spell out figures. All cablegrams should be confirmed by letter on the day they are written. Translation of code address and other code words to be attached to the carbon copy. Make two carbons of each cablegram. File one with the correspondence and send the other to the accounting department.

2. A brief description showing the nature of the various cablegrams and their cost will be helpful in judging the best way to send a message. Thus:

Fast cablegram: To London 25 cents per word, in code or plain language, delivered immediately.

Deferred cablegram: To London 9 cents per word; to countries other than Great Britain, one-half ordinary rate; plain language only; delivered in 24 hours or less by Postal; at earliest convenience by Western Union.

Cable letter: (Western Union only) 12 words to London 75 cents, excess words 5 cents, plain language only; delivered within 24 hours in Great Britain, Ireland, and Cuba; to Continent by mail from London.

Week-end letter: (Western Union only) 24 words to London \$1.15, excess words 5 cents; to Argentina, Chili, and Peru, 24 words \$4.85, excess words 20 cents; plain language only; must be filed before midnight Saturday, and will be delivered Monday forenoon in Great Britain and Ireland; to Continent by mail from London.

Foreign Letters

When a concern has a foreign trade there are usually enough differences in the conduct of correspondence with branches and dealers in foreign countries to warrant the preparation of special instructions covering the variations from the home letter. In some lines of business, for instance, "follow copies" have to be sent, translations have often to be prepared, and special lists of dealers and branches need at times to be consulted.

Follow copies are sent as a safeguard in case the original is lost in transit. One copy is typed on a distinctive sheet marked at the top "Follow Copy" and sent with the original letter to the dictator. He in turn sends it through to the mailing department, which mails it at a later date so as to go out on some steamer other than the one bearing the original letter.

A similar method is followed in typing copies of letters to be translated. Only one copy is made on special paper and marked "Translation." Original and copy are both sent to the dictator, who in turn sends it to the foreign department to be translated.

CHAPTER XVII

THE MEASUREMENT OF STENOGRAPHIC OUTPUT

The Problem of Units of Measurement

There is no more difficult problem in the whole field of office management than the determination of standard units of measurement whereby the output and efficiency of a department may be measured. Management means control, and control means the making of decisions, while decisions in turn rest upon the comparison of facts. But facts cannot be compared unless they are all reduced to a common denominator and this can only be done by means of a unit of measurement. Where sets of facts cannot be reduced to a common basis for comparison, separate units of measurements must be adopted for each set of facts.

It is the difficulty attendant upon the selection of a common standard of measurement that makes the keeping of records in a stenographic department a "bugbear" to most office managers. "The work is too varied," they say. "You cannot adopt a unit that will apply to the taking of dictation, transcription from dictaphone records, the tabulation of statistical reports, the writing of letters, the copying of form paragraphs, addressing envelopes, making out orders, bills and invoices, and the hundred and one diverse duties of the modern office." The answer to this is that whereas no one unit may do it, several units will do it. A person might as well argue against the adoption of a yard rule, a gallon measure, and a pound weight because a store which sells cotton goods, oil, and sugar cannot reduce them all to one common basis of physical measurement. Neither is it an argument

to say that records increase the "overhead." Practically speaking, the whole office is an overhead expense.

The manager's duty is not simply to "cut down overhead." His ability is best tested by the increases in the overhead that pay. If he can control the wage problem, the distribution of work, and the cost problem by a method cheaper than the use of records based on efficient standards, then he should adopt that method. If, on the other hand, he adopts records as the means of his control and does not base them on carefully determined standards he may be getting not only wrong results but be deceiving himself in the bargain.

Advantages of Measuring Output

Some managers fail in their attempt to keep records of output by adopting inaccurate standards. For instance, a large office in Chicago measures the output of its typists by counting the number of letters, regardless of their length. Such a standard is obviously quite useless as a basis for comparing the efficiency of employees since letters usually vary greatly in length. If, however, the individual output is first accurately determined the information enables the office manager :

1. To compare output of individuals.
2. To estimate the amount of work left unfinished.
3. To equalize the work by distributing it over various time periods and by just assignments among individuals.
4. To decide upon salary increases and promotion in accordance with the deserts of the employee.
5. To work out a just system of determining wages based on a piece rate.
6. To estimate the progress in efficiency which may be made from time to time, in the department as a whole, as well as in the case of individuals.

Mechanical Measurement of Output

Some typewriter concerns equip their machines with a mechanical contrivance which automatically counts the strokes made on the typewriter and records them on a dial. The difference between the figures at the beginning and the end of the day shows the output for that period. In a large office this method may be used in connection with a "time ticket." When a girl is assigned a typing job she places a card into a machine controlled by a clock and stamps the exact time upon it. Before beginning her typing she enters on the card the figures shown on the dial. At the end of the job she again copies the figures from the dial and returns the card to the head stenographer who stamps the "in" time above the place where the "out" time was stamped on the card. This makes it easy to subtract one set of figures from the other and so compute both the elapsed time and the number of strokes made.

The Square Inch Method

When the length of the line is not standardized the "square inch" method of measuring output may be used to advantage. The nature of this method is indicated by its name. To carry it out a large square of transparent celluloid is marked into square inch sections which bear figures so scaled as to indicate the measurement of typed matter up to that point. The sheet is placed upon a letter with the upper left-hand corner of the scale resting directly over the corresponding corner of the typed matter. By reading on the inch-square the number resting over the lower right-hand corner of the typewriting, the number of square inches of typewritten matter is obtained. Two additional inches are added to cover the date, address, and other short lines, while one inch is deducted for each space between paragraphs. If the letter is double spaced, the number of square inches is of course divided by two.

Measurement Based on Number and Length of Lines

Perhaps as simple and accurate a method as any and the one most commonly employed for measuring typewritten matter is based on "line measurements," i.e., the typewritten

1	1
2	
3	2
4	
5	3
6	
7	4
8	
9	5
10	
11	6
12	
13	7
14	
15	8
16	
17	9
Etc.	10
	11
	12

Figure 29. Scale for Measuring Typewritten Matter by Lines

(Use first column for single space, second for double)

line is the unit. A rule or scale is made by typewriting on a slip of paper two vertical columns of figures—the numbers in one column being one space apart and those of the other column being two spaces apart, as illustrated in Figure 29. By placing it so that number 1 is on the first line of the body

of the letter, it is easy to determine the number of lines written by noting the number of the scale resting on the last line of the body of the letter.

While this method is simple enough it is apparent that it does not provide an accurate measurement unless the *line itself is standardized*. To do this seems a simple matter yet it has not so proved in actual practice. One firm standardized the length of its lines at six inches and set all its typewriters at sixty spaces (six inches) accordingly. After its adoption three weaknesses developed which necessitated careful study before a satisfactory adjustment was effected.

Disadvantages of Standard Length of Line

First it was discovered that operators who were concerned with the appearance of their letters did not take kindly to a rule that insisted on conformity to a six-inch line when a very short letter was written. In consequence they wished to shorten the line in proportion, but as this practice would have negated the purpose of the standard line, this otherwise commendable desire had to be sacrificed. A second difficulty arose when a dishonest stenographer attempted to "beat the game" by shortening the lines a few spaces, it being possible for as much as 10 per cent of a line to be cut off and the letter still pass as up to standard requirements. This practice was soon corrected by increased care in inspecting the work. The final difficulty was the allowance which had to be made for the spaces between paragraphs, the shortened lines of the address, the salutation, and the complimentary close. These variables were absorbed into the scheme by applying to them the alchemy of the general average. For example, one line was deducted for each space between the paragraphs of a single-spaced letter and three lines were added to the total thus arrived at so as to cover everything outside the body of the letter.

Standard of Measurement for Dictation

In addition to measuring the typing output of each stenographer by means of the standard line, it is necessary to determine, for reasons which will be explained later, the amount of dictation each girl handles. To do this they must be judged individually. If one girl writes a fine hand, the pages of her note-book will obviously contain more work than those of another girl who writes a free, flowing hand. By means of tests covering the transcription of several pages the head stenographer should be able to set an average time for transcribing a page of notes for each operator and judge with sufficient accuracy the amount or number of typewritten lines a page of any particular girl's notes will produce. This measurement, however, is for a second set of records which the head stenographer prepares. At present it is sufficient to know that the standard of measurement for dictation is the "page of notes."

Time Required to Measure Letters

The measuring and computation of letters by either the line or square inch methods ought not to average more than ten seconds each. If the reports are made up by the operators themselves after some such method as described for making up the weekly work record, carbon copies of the letters should be used and not the originals. This obviates the necessity for stopping to measure each letter as it is finished and does not hold up the mailing schedule.

Weekly Work Record

Having standardized the work so far as is possible the next step is to record the individual output. To this end each girl enters daily her output on a sheet which covers her work for the week. An illustration of this sheet is shown in Figure 30.

WEEKLY RECORD OF WORK

DATE	BEGAN	FINISHED	DICTATION	TRANSCRIPTION	COPYING	OTHER WORK	NOT WORKING	FOR MR	NO. PAGES OF NOTES	NO. LINES TYPED
9/17	9 67	9 15				✓		Record		
		9 40				✓		Comparing		
		11 15						Cobb		
		12 00	✓	✓				Cobb	5	94
	12 45	1 15	✓					Cobb		
		5 00		✓				Cobb	17	462
9/18	8 56	9 10				✓		Record		
		10 40		✓				Cobb	7	180
		11 30			✓			Pierce	4	106
		12 00	✓					Holden		
	12 45	12 55				✓		Supplies		
		2 50		✓				Holden	8	197
		3 05					✓	Away from desk		
		4 10			✓			Pierce	4	122
		5 00	✓					Cobb		

Figure 30. Weekly Record of Work

On which each stenographer enters daily in the proper columns the kind and amount of work done. This record she keeps in her desk until the end of the week.

Each girl enters the details of the quantity of work done and the time spent in doing it during the week. The kind of work is indicated by a check mark in one of the center columns, the time it occupies is entered in the second and third columns, while the number of pages of shorthand notes taken down and lines typed are entered in the last two columns. This data is recorded daily either at the end of the day's routine, if work permits, or first thing on the following morning. As many sheets are used as are required to give full details of the week's work.

Definite limits should be set for the beginning and ending of each task. In this way only can the employees be held to rigid account for their time. Stenographers therefore should be instructed that the dictation period begins with the time a girl leaves her desk and ends when she returns, including all interruptions while taking dictation. All transcription and copying are figured from the time transcribing or copying actually begins until the operator is called for other work, or until lunch or quitting time. In figuring time of "other work" care should be taken to indicate its exact nature as well as the time started and ended. If "not working" at any period every moment spent away from the desk should be explained fully such as: "no work assigned," "away for relaxation," and the like.

Instructions for Preparing Weekly Record

Full instructions should be given the workers, showing them how to fill out the blank form. For example, they should be instructed:

1. To write their names on the top of the sheet.
2. To place the date in the correct column.
3. To enter the time of arrival at their desks ready for work under the caption "Time Began."
4. To write down in "Time Ended" column the time

any job is finished, and work of another kind is about to be undertaken.

5. To check the kind of work done in the appropriate columns headed, "Dictation," "Transcription," etc.
6. To write in the name of the dictator, or the description of the "Special Work."
7. To compute the number of sheets of dictation notes and the number of lines transcribed or copied.
8. To enter these computations in the columns provided for them and opposite the names of the different persons for whom the work was done.

To cover variations of work, such as copying statistical matter and addressing envelopes, which come under the caption of "Other Work," instructions should be given as follows:

1. Special rules apply to the computation of each kind of statistical work.
2. All addresses on envelopes and cards should be counted as two lines.
3. Consult head stenographer in all cases where in doubt as to the method to be used.
4. When work is rewritten because of stenographic errors, credit should be taken for it only once.

Importance of Clearness in Formulating Rules

In drawing up the rules covering the measurement of work—rules which are to be incorporated in the office manual—care should be taken to define clearly the position of the management in all cases where any doubt or differences of opinion might arise. There must be no ambiguity, no two ways of construing the meaning, and good reasons should be given for the position taken in view of the fact that many decisions must appear more or less arbitrary to the employee. Hence, the rule, "When work is rewritten because of steno-

graphic errors, credit must be taken for it only once," should be supplemented by some such reason for the rule as follows: "It is only fair to all concerned that no work should be counted except that which is finally accepted as satisfactory, and only correct work can be satisfactory in the long run to both you and the firm. Incorrect work is not only *bad work*, it is worse than *no work*. In many cases it would be better to send no letter at all than to mail one incorrectly written. A stenographer or typist has produced nothing for the firm, therefore, until she produces a *correct* letter."

Handling Corrected Work

When it becomes necessary to rewrite a letter because of carelessness and the stenographer who made the error does the rewriting, she should figure the time it takes her without crediting herself with the number of lines. If some other person rewrites the letter, she may take credit for the number of lines so written, but the girl who first wrote the letter should deduct an equal number of lines from her record.

When a letter is rewritten, the carbon copy of the spoiled letter should be destroyed. To make sure that an uncorrected copy does not go unidentified, every corrected copy should be marked, "Corrected." The difference between the statements of the two copies may have an important bearing upon any disputes which may arise later.

Daily Report Sheet

Having determined the method and the means of recording the work done, the next procedure is for each girl to report to the head stenographer the amount of work she does day by day. This information is supplied on the daily report shown (Figure 31).

This record must be filled out by each girl and handed to the head stenographer not later than 9:15 every morning.

DAILY REPORT		
Name_____ Time Filled Out_____ Date_____		
NUMBER OF LINES TRANSCRIBED	NUMBER OF LINES COPIED	APPROX. NO. OF LINES TO BE TRANSCRIBED

Figure 31. Daily Report of Work

On which each stenographer reports to the head stenographer the kind and amount of work done day by day—as entered on the weekly record (Figure 30).

The information it contains is simply a summary of the total number of lines either transcribed from notes or copied and the approximate number that remain to be transcribed in the girl's note-book. With the information furnished by the daily reports before her, the head stenographer can report the status of work to the office manager—as will be explained in the following chapter where the further uses of the weekly record sheet and the daily report are discussed.

CHAPTER XVIII

METHODS OF CONTROLLING STENOGRAPHIC OUTPUT

Stenographic Department Reports

In the preceding chapter two forms are described: one a record of each girl's weekly output and the other a daily report of work done. These last reports go directly to the head stenographer, who in turn gathers from them the information she needs for the supervision of her department and also any information of special importance to the office manager. For her own guidance she requires information to enable her: (1) to assign dictation or copying to the operators; (2) to compare the work of individuals with their past performances and with the work of the department as a whole; and (3) to control the work of dictation. The first purpose mentioned is met by constructing a daily schedule-of-work sheet, to be described presently; the second, by an analysis of the daily reports of work done; and the third, by means of three weekly analyses of the weekly records. The office manager is also interested in the last two reports and provision is made for summaries of these records to reach him.

Schedule of Work Sheet

A schedule of work sheet is a gage upon which the pressure of work in the department is constantly registered against each individual's name. To keep track of the work which each stenographer has ahead of her is always a difficult problem of control. It usually arises every time a dictator calls for a stenographer, but more particularly in the afternoon.

The head stenographer, not being able to keep in mind the exact amount of dictation each girl has in her note-book, is forced to disturb a number of operators in an attempt to find a girl whose work is sufficiently near completion to permit her taking further dictation. This interruption not only wastes time, but the information so obtained is not sufficiently definite.

To determine how long a girl will be occupied with the work ahead of her it is necessary to know not only the amount of notes in her book at any time of the day, but also the average rate at which she transcribes them. To obtain this information each girl is furnished with a card (Figure 32), which she fills out and puts upon the head stenographer's desk on returning from taking dictation:

WORK AHEAD REPORT					
Name _____			Date _____		
TIME			NO. OF PAGES OF NOTES TO BE WRITTEN OUT		
CALLED	RETURNED	STARTED TRAN- SCRIBING	ALREADY IN BOOK	DICTATION OF LAST PERIOD	TOTAL

Figure 32. Work Ahead Report

After each dictation assignment, the stenographer enters on the above card, for the information of the head stenographer, the number of pages of transcription ahead of her in her note-book.

The rate at which a stenographer transcribes her notes is ascertained by a series of tests, covering several days, so that an average can be arrived at which will show the approximate time needed for transcribing one page of notes. Of course this time varies with different operators since it depends not only on speed in typing but also on the number of shorthand characters to a page. Stenographers differ greatly in this last respect. Some use large, others small characters. Figures based on pages, therefore, should not be used as a means of comparing efficiency, nor should the tests be based on what a stenographer can do in a burst of speed but rather upon her regular daily pace. Also the speed of transcription in some cases will be found to be continually improving and the record must be corrected accordingly.

With the foregoing information at hand a work schedule may be planned, as shown in Figure 33.

WEEK BEGINNING _____																					
NAME	MINUTES PER PAGE	MONDAY										TUESDAY									
		9	10	11	12	1	2	3	4	5	9	10	11	12	1	2	3	4	5		
Miss Barnes	8																				
Miss Jones	6																				
Miss Smith	15																				
Miss Brown	10																				
Miss Robinson	12																				

Figure 33. Work Schedule

On which the head stenographer records the approximate time required by each stenographer to finish the work ahead—as indicated by the short inner lines.

It will be noted that in addition to the spaces provided for stenographers' names and the minutes per page, the sheet is divided into further spaces corresponding to daily, hourly, and half-hourly periods of time. These, as will be explained presently, are used to show the approximate hour when the girl will have finished her transcription and be ready for more work.

Keeping the Work Schedule Record

On reaching her desk in the morning the head stenographer takes out the work schedule sheet. With the daily reports (Figure 34) of the operators before her she notes first the number of pages of notes still to be transcribed by each girl. This number she multiplies by the number which represents minutes per page and stands opposite each stenographer's name, to arrive at the number of minutes of work ahead of each girl. This fact is indicated on the schedule by drawing a pencil mark across the number of spaces indicating the time during which the girl will be occupied. When a dictator calls for a stenographer, reference to the work schedule shows at once what girls are available.

A concrete case will make the operation of the system clear: Say Miss Jones is called at nine o'clock to take dictation. A glance at the work schedule shows that she has two thirty-minute periods still ahead of her. However, she is selected and sent out. Upon her return an analysis of her report shows:

Time went out.....	9	o'clock
Time returned	10:55	"
Time started transcribing....	11	"
Number of pages in note-book		
to be transcribed.....	9	

The 9 pages of notes multiplied by 6 equals 54 minutes, or approximately 1 hour's work. This added to her hour's work left over enables the head stenographer at once to figure that Miss Jones has work ahead for 2 hours or until 2 o'clock, allowing 1 hour for luncheon.

Method of Assigning Work

When possible, the stenographer most familiar with the work of this particular dictator is sent. If the schedule shows

that all the girls have work enough to keep them busy until closing time, the dictator is so informed. In this case, if he wishes to defer the transcribing of letters dictated earlier in the day, he may be given the time thus released for fresh dictation.

The advantages of using the work schedule, from the point of view of discipline, are: no time is lost in selecting a stenographer, no disturbance is made in sending her to the dictator, the girls are not overtaxed by poor adjustment of the work, and no big batches of notes are left uncopied at the end of the day. When a stenographer has her time laid out for the day she should not be allowed to take any further dictation.

It often happens that some dictator demands a particular stenographer regardless of the work she has ahead. Thus, a girl may have nearly all her time occupied for the day and is called for further dictation. In this case the probable number of additional pages she will be able to finish (based on the number of minutes it takes her to transcribe one page of notes plus the probable time of taking dictation) is estimated and the dictator informed that he may have the services of this stenographer for such a period of time only. If he needs more time another stenographer will be sent, provided it is necessary for the letters to go out that day.

A Daily Summary Report

Just as the work schedule enables the head stenographer to keep her finger on the working pulse of each individual in her department, so may the daily summary report (Figure 34) be made to indicate the variations in the output and the work ahead for the department as a whole. Accordingly this report is made out by the head stenographer and the figures shown in the total columns are sent to the office manager daily.

DAILY SUMMARY REPORT						
Miss	AUGUST 1			AUGUST 2		
	NO. LINES TRANS.	APPROX. LINES LEFT OVER	NO. LINES COPIED	NO. LINES TRANS.	APPROX. LINES LEFT OVER	NO. LINES COPIED
Goldbloom ...	279	...	...	...	...	...
Brill.....	244	70	551	573	...	108
Cronin.....	....	...	...	...	...	...
Griffin.....	170	80	193	211	...	205
Greer.....	430	85	30	373	120	...
Etc.....	.....	.....	.....	.....	.....	.....
.....
.....
.....
Total	3,451	295	11,045	3,009	180	8,705

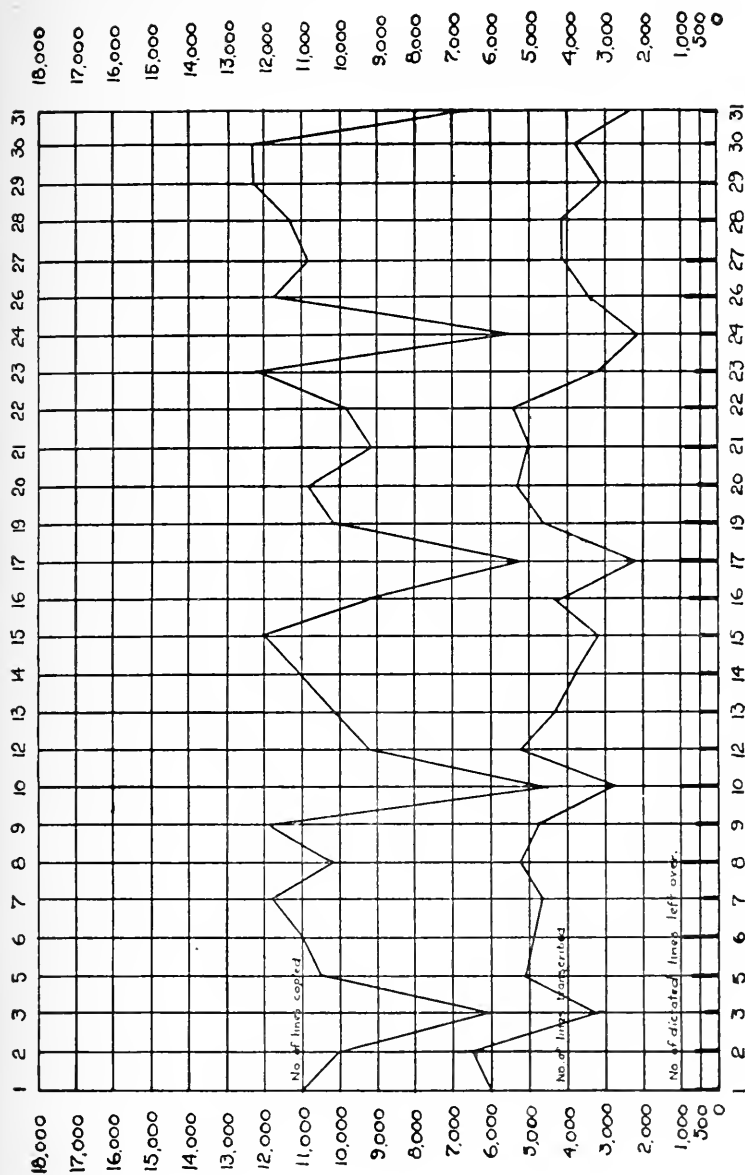
Figure 34. Daily Summary Report

Shows the amount of work done by the department as a whole and the amount left over for each day. The head stenographer sends the total figures to the office manager.

While this report aids the head stenographer in her administrative capacity it is chiefly used to furnish the office manager with information as to the progress of work by showing the quantity completed and the amount left over each day. If much work is left over and the girls are obviously unable to cope with it, more help can be procured.

Charting the Progress of Work

The effectiveness of the above report is increased by presenting it in the graphic form illustrated in Figure 35. Such a chart shows the daily output of typists and stenographers, and the amount of work left over in a way which



throws into relief fluctuations in output and the proportion of one kind of matter to the other.

The interpretation of the chart is simple since the figures running from top to bottom are arranged in a descending scale from 18,000 (a number sufficiently large to cover any estimated output for the month) to zero. The numbers running across the top and the bottom of the sheet represent the days of the month. Holidays, including Saturdays, are written in red.

Analysis Reports

While the reports so far described record the daily activities of the stenographers, they are not in the best form to show the progress in speed of the individual or of the department as a whole. To obtain this information the head stenographer tabulates the data on the weekly work records (Figure 30) in three analysis reports as follows:

1. Stenographic report (Figure 36), showing:
 - (a) For each stenographer:
 - Number of days worked
 - Time spent in dictation
 - Time spent in transcription
 - Number of sheets
 - Number of lines
 - Number of lines per sheet
 - Number of lines per minute
 - (b) Department average of lines per minute
2. Copying report (Figure 37), showing:
 - (a) For each typist:
 - Number of days
 - Time copying
 - Number of sheets
 - Number of lines

- Number of lines per sheet
 Number of lines per minute
 (b) Department average of lines per minute
3. Time report (Figure 38):
- (a) Time accounted for, showing:
 - Time dictation
 - Time transcription
 - Time copying
 - Other work
 - (b) Time not working
 - (c) Total time
 - (d) Total time to be accounted for
 - (e) Difference between total time and time to be accounted for

STENOGRAPHIC RECORD							
September 9-14, 1918.							
MISS	DAYS WORKED	TIME DICT. (MIN.)	TIME TRANS. (MIN.)	NO. SHEETS	NO. LINES	NO. LINES PER SHEET	NO. LINES PER MINUTE
Ainesworth ..	5½	25	40	10	203	20.30	5.08
Keale	5½	518	487	158	1,708	10.81	3.51
Greer	5½	250	470	86	1,605	18.78	3.41
Schmitt	5½	475	1,405	194	4,028	20.76	2.87
Griffin	5½	865	990	138	2,267	16.43	2.30
Werner	4½	299	1,066	163	2,400	25.72	2.25
Etc.							
Department average of lines per minute—2.05							

Figure 36. Weekly Stenographic Summary

Weekly summary of number of sheets and lines typed from stenographic notes, also giving the department average of lines per minute—in this case 2.05.

COPYING RECORD						
September 9-14, 1918.						
MISS	DAYS WORKED	TIME COPY'G (MIN.)	NO. SHEETS	NO. LINES	NO. LINES PER SHEET	NO. LINES PER MINUTE
Ainesworth...	5½	2,096	929	8,745	9.41	4.17
Griffin....	5½	110	25	436	17.44	3.96
Schmitt.....	5½	270	333	974	2.92	3.61
Sherrick.....	5½	2,130	3,675	7,350	2.00	3.45
Greer.....	5½	127	21	437	20.91	3.44
Meehan.....	5½	1,410	2,077	4,727	2.28	3.35
Goldberg.....	5½	2,020	3,166	6,367	2.01	3.15
Etc.						
Department average of lines per minute—3						

Figure 37. Weekly Copying Summary

Weekly summary of number of sheets and lines copied, also giving the department average of lines per minute—in this case 3.

TIME ACCOUNTED FOR								
(In Minutes)								
September 9-14, 1918								
MISS	DICT.	TRANS.	COPY	OTHER WORK	NOT WORK- ING	TOTAL	TOTAL TO BE ACCT. FOR	DIFF.
Ainesworth ..	25	40	2,096	110	17	2,288	2,265	25
Greer	250	470	127	1,356	115	2,318	2,265	53
Griffin	865	990	110	165	170	2,300	2,265	35
Goldberg.....	...	...	2,020	90	95	2,205	2,265	-60
Golden.....	90	120	540	1,515	...	2,265	2,265	...
Keale	518	487	225	957	67	2,254	2,265	-11
Etc.								

Figure 38. Weekly Time Summary

This report summarizes the total time to be accounted for and is used to check up the time recorded by individual stenographers.

Instructions for Compiling Analysis Reports

The method of making each analysis should be thoroughly explained to the head stenographer and complete instructions written covering the details asked for in the report. For example, take the item, "Department Average of Lines Per Minute." Instructions should say, "Divide the total number of lines by the total time spent in transcription and enter the result at the bottom of the page, etc." For the items, "Lines Per Sheet" and "Lines Per Minute," the instructions should read, respectively: "Divide the number of lines by the number of sheets and enter the result under heading 'Lines Per Sheet.'" "Divide the number of lines by time spent in copying and enter the result under the heading 'Lines Per Minute.'" "

As the "Time Accounted For Report" (Figure 38) at first glance seems more complicated than the others, instructions covering its preparation should be given as follows:

Enter on the sheet the time of dictation, transcription, copying, other work, and time not working together with the names of the stenographers and typists.

Total the five columns reading from left to right and enter the result under the heading "Total."

Multiply the number of days and fractions of days covered by the record, by number of minutes per day. (Here put the number of minutes in the working day of the particular office.)

Enter result under heading "Total to be Accounted For."

Subtract the smaller number from the larger in columns headed "Total" and "Total to be Accounted For."

Enter difference under the heading "Difference," preceded by a minus sign if the number in the "Total to be Accounted For" column exceeds the number in the "Total" column.

With these instructions the head stenographer should have

little trouble in preparing the reports, although sample computation sheets tend to simplify the instructions.

The Dictator's Record

While it is important to check up the operators it is well also to know what the other "party to the transaction," i.e., the dictator, has been doing. For the "Dictation Record," therefore, the weekly work record of each stenographer furnishes the required data. This report, consisting of one sheet, is illustrated in Figure 39.

DICTATION RECORD						
September 24-29, 1918						
DICTATORS	TIME DICT. (MIN.)	TIME TRANS. (MIN.)	NO. SHEETS	NO. LINES	NO. LINES PER SHEET	NO. LINES DICTATED PER MIN.
Thornton.....	150	745	74	1,351	18.25	9.00
Caswell.....	880	720	110	1,885	17.13	2.14
Rose.....	25	61	5	107	21.40	4.28
Cobb.....	150	315	32	669	20.90	4.66
Spillman.....	330	833	79	1,538	19.46	4.66
Farnham.....	85	15	4	86	21.50	1.01
Johnstone	15	5	2	32	.16	2.14
Etc.						

Figure 39. Weekly Dictation Summary

This report is used to check up the work of dictators so that the time of stenographers shall not be wasted.

Detailed instructions should be given the head stenographer for preparing this report as in the case of the stenographers. Methods of computation, of checking results, of posting the items, etc., should be fully explained; for, while the operations are extremely simple, to one not "familiar with

figures" the work appears somewhat involved. It is unnecessary to go into details here as any office manager will at once comprehend the routine.

Making Use of the Reports

The stenographic, copying, time accounted for, and dictation reports may be used for purposes other than records for "keeping tab" on production. For instance, the stenographer herself has no control over the time spent in taking dictation or over the amount of work given her. The one thing over which she has control is the time she takes to turn out the work assigned to her. Copies of reports, therefore, showing her just what she is doing and comparing her work with that of others in the department, tends to promote a feeling of friendly rivalry that no other incentive—not even money rewards—will arouse. Furthermore, a comparative record, of the nature of the "dictation report," produces an equally desirable effect upon the dictators. Accordingly, as soon as a monthly analysis is made and the office manager and head stenographer have had opportunities to note the results and examine the causes of any material differences from previous records or standards, copies are sent to each operator and each dictator interested.

At first, opposition may in some cases be expected, from both stenographer and dictator, but experience has shown that within a few months the benefits accruing from these reports will cause all objections to cease and, as a rule, the original opponents become staunch supporters of the system. To cite one office manager's experience, after the work records had been kept by the stenographers for two months, one of them, who had not been in sympathy with the changed method of management, objected to keeping a record of her daily work. The office manager and head stenographer attempted to convince her of the usefulness of this scheme, but to no

purpose. They then submitted the question to the whole department, reasons for the records were reviewed, and the stenographers assured that all records would be discontinued if they wished it. The vote was unanimously in favor of continuing the system and in a short time they even convinced the girl who had raised the objection, of its benefits. Moreover, after the first analysis of the monthly reports it became apparent that, under the same conditions and on the same class of work, some stenographers turned out far more work than others. No wages were reduced but, when warranted, they were increased—stenographers of equal ability receiving equal remuneration.

The objections of dictators are usually much the same as those of stenographers. A few sensitive souls will always be found who dislike having their records made public. The majority, however, especially the higher executives, will welcome the comparison and will be influenced to respect the time of stenographers by not calling for a girl until their work has been sorted and they are ready to dictate, and by not keeping the girl waiting during long telephone conversations. Such an analysis also helps the office manager to arrange schedules of dictation for the executives of the concern and thereby to overcome one of the obstacles to the smooth working of a central department.

Transcribing from Dictating Machines

The number of firms which have replaced stenographers with dictating machines is growing rapidly. In these cases the problem of control concerns merely the work of the typists, or "transcribers." As the transcriber's work with the cylinder records is easily measured, the centralization of control for the transcribing force in a large office can be worked out successfully along the same lines as those shown for the stenographic department.

CHAPTER XIX

HANDLING OFFICE DETAILS OF CORRESPONDENCE DEPARTMENT

Office Detail of Stenographic Department

In many companies the stenographic department handles more or less office detail. Two reasons make it desirable to do this. Often such work serves as a "fill-in" for the time not occupied with stenographic work, but more frequently it is work which cannot be separated readily from the activities of the stenographic department. A line cannot be sharply drawn between the two kinds of work but a typical case will show how these activities may be handled when under the control of the stenographic department.

Although some of the activities here discussed, such as the handling of advertising literature, may in some companies be part of the work of the advertising department, yet these activities are not inconsistent with the other duties of the stenographic department. Moreover, even though these activities may be under the management of some other department, the methods here described may be used with little change.

Disposing of Copies

When standard instructions have been formulated for the typing of a letter, it then becomes essential to draw up rules for the disposition of the original letter, the carbon copy, and papers. The rules employed in one office are:

"Enclose original in envelope, place in out mail basket. Arrange in basket for filing, papers for the filing department (or clerk). Each evening place copies for filing in

tray on head stenographer's desk; manila copies and letters that have been answered in lowest compartment; white copies for sales managers in middle compartment."

Requisitioning Letters from General Files

To many persons the making out of a requisition for correspondence is not the simple matter it seems. A filing system represents a classification of data which is seldom understood by the average stenographer or typist, and instructions should be very explicit if there are a number of divisions within the general filing classification under which letters are filed. The most essential part of the instructions is the requisition form itself. The following is an example:

Letter	Telegram	Invoice	Date			
			Order			
From To			Initialed by			
SUBJECT			Dated			
Signed (Name in full)						

Requisition for Letter

Extracts from the filing department's rules should clearly explain the method of making out the requisition and the regulations governing the return of the material to the files. For example:

"If originals of letters from, and copies of letters to, an individual or branch are required, check both 'From' and 'To' on the requisition. If only originals are required check

'From'; if copies, only check 'To.' Separate requisitions must be made out for each branch or individual. Make requisitions in duplicate. Pin original and duplicate together and send to mailing department. Original will be kept in filing department; duplicate will be returned. Return duplicate form with letters when sending them back to general file."

Typists' Tickler File

Dictators often wish certain papers brought to their desks at some future date. To insure that this will always be done a tickler file should be provided for the stenographic department and a definite rule adopted for marking such letters—which all dictators are instructed to follow. A common practice is to write the date when letters are to be brought to the dictator's desk in the lower left-hand corner. In case he wishes a cross-reference slip to be made out he indicates the name to be entered on the cross-index filing slip. The following card provides a suitable means of collecting the neces-

Name: A. B. C. Publishing Co. Date: Oct. 2, 1918.		File Index No.:
Subject: CORPORATION INSURANCE		
CALL-UP DATES	DISPOSITION	
1. Oct. 19	Sent Circular A.	
2. Nov. 1	" " B.	
3. Nov. 15		
.....	
.....	
.....	

Cross-Index Card Used for Following Up Future Correspondence

sary data, and in conjunction with the tickler affords a sure method of bringing the matter to the attention of the dictator at the proper time.

Entries are made on the card as shown above, and also on the original letter, to indicate how the correspondence is being followed up. After the original letter is consulted, it is returned to the general files and the index card placed behind the guide corresponding to the date when the matter is to be called up. By consulting this file daily the typist can place the papers requiring attention on the day the dictator desires them for reference.

The Head Stenographer's Tickler File

If the dictator does not indicate when papers are to be brought to his attention, but the nature of the letters show that an answer is required, some system should be provided for taking care of it automatically. One concern provides for this as follows:

The head stenographer keeps in her desk a tickler file consisting of folders numbered 1 to 31. When a letter is dictated calling for an answer, an extra white copy is made and to it all other papers—the latest on top—are attached. A regular schedule is made out showing under what dates to file the matter which is to come up at a certain time. Thus, letters expecting an answer from Chicago, would be scheduled six days ahead under certain conditions where the information can be readily obtained, but ten days if an inquiry or investigation must be set on foot. Other cities and districts, such as San Francisco and Portland, are given scheduled time commensurate with their greater distances and the nature of the correspondence.

When the material is finally put on the dictator's desk and the matter closed, the head stenographer is instructed to detach papers, to send carbon copies and originals to the gen-

eral files, and to place original memos or copies in dictator's private files and destroy the extra white copies of letters.

Cross-References

If the time-saving rule of discussing only one thing in a business letter were followed, there would be less need for a system of cross-reference; but often two or more names or addresses are involved in one transaction and it becomes necessary to make a record which will show the transaction under each name with a reference to the other. One firm in its manual of instructions disposes of the matter thus:

"It is sometimes advisable to file the correspondence of two persons under one name; for instance, the correspondence of John Brown, subscriber, under the name of John Smith, agent. The transcriber, in handling such cases, must write on a sheet of manila paper the name and address of the person whose correspondence is filed under another name, together with the notation 'Filed under John Smith.' The cross-reference sheet is filed under the name John Brown to show that his correspondence may be found with that of John Smith."

The Use of the Form Letter

The handling of inquiries and complaints and the modern methods of advertising and selling, call for some system whereby hundreds and even thousands of letters of request may be answered in a single day or at least within a very short period of time. This can be done without slighting the service to the customer when the requests are more or less of the same character. It is then possible to divide them into a few classifications and to standardize the answers to them.

For example, practically all complaints can be grouped under a few headings such as "Non-delivery or shortage," "Unsatisfactory service," "Defective merchandise," etc., and

a standard answer adopted for each. Thus many complaints may be handled satisfactorily by a form letter without going into the details of a special adjustment. All the requisite time may then be given to the construction of this standard letter. It will be built upon the experience and the best thought of the concern and will not be "improvised" on the spur of the moment by a clerk or executive who may be busy with other things or momentarily irritated by the nature of the complaint before him at the time of dictating a reply.

Filling in the Form Letter

If the form letter merely serves as a sample to be copied nothing more need be said about it. But if it is a multigraphed letter which requires the name and address to be filled in then this last operation is done in one of two ways: (1) the "fill-in," whether in the body of the letter or the heading, *contrasts* with the color of the form letter; or (2) the "fill-in" is made to *match*.

As the process of filling in the heading is somewhat different from that used in writing an original letter, definite instructions should be given to the typist doing this work. The first rule, as taken from an office manual, cautions the typist to select a ribbon that will match the color of the form letter:

"1. Since multigraphed forms do not run all the same shade it will reduce the number of times ribbons must be changed if care is exercised in first selecting the multigraphed sheets which are of the same shade as the ribbon in the machine."

The second rule gives directions for obtaining exactly even margins:

"2. Feed letter into machine as far as the second or third line of the text, then adjust letter by rolling back the paper so that first line touching the left-hand margin is visible

above the triangle in the line gage. Roll back seven spaces, for a three line fill-in address, followed by two spaces for the salutation, and again two spaces before the body of the letter.

For example:

MR. J. F. JONES,
27 Beech Street,
Minneapolis, Minn.

MY DEAR SIR:

We are sending you by this mail, etc."

The same attention should be given to the addressing of the envelope and, where the enclosed letter is not filled in, care should be taken to choose a ribbon to match the type of the enclosure. Either the poor matching of colors or the irregularity of the form will emphasize the "form letter" idea, which is so repugnant to some people.

The Form Letter in an Advertising Campaign

Advertising may be conducted with the object of provoking inquiries about a firm's goods or of producing direct orders. Either of these two methods generally results in a large volume of correspondence the handling of which usually falls to the stenographic department. The separation of this kind of routine work from the legitimate work of the advertising department is possible because most of the correspondence can be handled through form letters and standardized order forms as follows:

All inquiries should naturally come first into the advertising department. Here a competent clerk reads each inquiry and indicates by a pencil mark the symbol of the form letter to be written in reply. These letters are then distributed among the typists of the stenographic department who, noting the symbols "BB," "OO," etc., at the top of the inquiries, look up the "BB" form letter, etc., in the folder and begin to copy it.

Record of Form Letters Dispatched and Inquiries Answered

In addition to the foregoing routine there may be a certain amount of detail work connected with the preparation of record cards, the dispatching of the letters, the sending of carbon copies to branch managers, salesmen, and others interested in following up the inquiries and "turning them into customers."

A record card and a successful method of handling inquiries is as follows:

RECORD CARD INQUIRIES	
Firm name_____	_____Office
Individual's name_____	Date of answer_____
Address_____	Subj. of inquiry_____
No. pes. advtg. sent_____	_____
	Means of inquiry_____

Inquiry Follow-Up Card

This card is filled out in duplicate for such form letters as require a record of the kind. The original card is attached to the letter of inquiry and sent to the advertising department and the duplicate card is sent to the branch or salesman from whose territory the inquiry came. Thus one card becomes a part of the home office tickler records by means of which the agent or salesman is automatically followed up every few weeks; and the other card finds its way into the follow-up files of the branch office where it stands as a constant reminder until the inquiry has been turned into a sale.

Handling Envelopes, Labels, and Enclosures

Instructions dealing with methods of addressing and enclosing the various kinds of form letters, folders, booklets, etc., are as necessary here as in the handling of regular correspondence. A complete list of symbols pertaining to form letters, advertising circulars, etc., should be provided the typist, together with the kind of envelope or label (sticker) used. Assuming that there are several different types of product each with its own circular literature and form letters, the advertising matter relating to one product should be labeled and so numbered that the class of help which usually handles this kind of routine work need make no mistake. An example of listing and symbolizing the advertising matter relating to a particular product is as follows:

F. Kodak No. 3

1. B. K. 3820.....6¼ envelope
2. B. K. 3953.....6 x 9
3. B. K. 4215.....Sticker
4. B. K. 4710.....6¼ envelope

If there were ten types of Kodaks, each would have its own symbols and be entered on the list as A. Kodak No. 20, D. Kodak No. 135, etc. In this way a periodical follow-up system can be set in motion for each prospective purchaser who may have shown an interest in one or more of the firm's products. The work can be carried out by the stenographic department guided by the standard instructions given and the cost of supervision thus reduced to the minimum.

Circularizing Campaigns

The growth of direct advertising methods, i. e., circularizing a selected list of prospective customers, has added another burden to the stenographic department of many concerns. By this method letters and advertising matter are

scheduled for mailing on certain dates. The stenographic department is notified by the advertising manager sufficiently in advance of a campaign of this kind so as to prepare for the extra work. In this connection it is of course important to give the specific instructions previously described for addressing envelopes and folders and for making the "fill-ins."

Relation of Stenographic Department to Order Department

It frequently happens that after the orders for the day have been read and interpreted the order department has all the copies of the order forms made in the central stenographic department instead of having this work done by a "copy clerk" in its own department. The relation of the order clerk to the stenographic department is much the same as that of the chief clerk in the advertising department. He must send to the stenographic department complete information to be filled in on the order blank. Besides this there are certain things which may be put down as written instructions, such as, for instance:

1. List of symbols of the various forms to be used for different classes of merchandise.
2. Number of copies required in each case.
3. Detailed explanation of the various items, headings, or terms used on the forms.
4. Descriptions of any variations in handling a domestic order and a foreign order, or a retail order and a wholesale order.

Routine in Copying an Order

Let us suppose that a typist in the central department gets a batch of orders from the order clerk. She picks up the first letter and, besides the usual information, finds a number of notations marked in pencil by the order clerk. She reads the

letter and notes that it is a domestic order and calls for, say, certain typewriter supplies such as ribbons. Turning to her office manual she notes that orders for "Ribbon Supplies" are to be made out on Form Rs-21 and that seven copies are to be typed for all domestic orders. Choosing Form Rs-21, she finds many terms that need explanation. The department manual, however, interprets them. For example, on the order blank is the caption, "Office Order Number." This is explained in the manual as the number by which an order for supplies will be identified hereafter; furthermore, that this number is assigned to each individual order by the order clerk and will be found marked in pencil on the letter or sales order sent to her from the order department. Similar instructions cover the other captions on the order. The typist is instructed to fill in all items in accordance with the penciled notes of the order clerk and such other information as is gathered from the customer's letter relating to amount wanted, color, machine, width, inking, brand, etc. Finally she is told that all items in the "body" of the order are to be double-spaced.

Cutting Stencils

If there is a central stenographic department, the cutting of stencils by a typewriting machine is part of its duties. Dry fiber stencils with pasteboard frames are commonly employed for addressing purposes where a large mailing list is frequently used in sending out bulletins, house organs, and other mailing matter. Special typing machines are now on the market which feed these stencils automatically, throw the ribbon into position for writing the first line on the frame (thus making it easy to file and to find the stencil when wanted), and remove it when the stencil shifts to the position for cutting the fiber. The position of the address to be cut on the stencil is indicated as follows:

LARE, GERTRUDE T.	S
<div style="border: 1px solid black; padding: 10px; text-align: center;">Miss Gertrude T. Lare, 214 Lincoln Avenue, Fort Fairfield, Me.</div>	

The typewriter must be operated with an even but firm staccato touch if the spacing is to be regular and the fiber cut so as to give a clear impression. The letter "S," as shown above, identifies all the stencils cut for the quarter beginning with, say, July 1, 1918. Other quarters and years have other symbols.

Making Up and Filing the Stencil List

The stencil list is usually made up from many sources; for example, a concern publishing a magazine would get new names daily from new subscribers. In a large organization, such as the publishers of the *Saturday Evening Post* and the *Ladies' Home Journal*, stencils are cut by machine and a special department is provided for this work alone. Smaller concerns handling from 50,000 to 200,000 names can take care of them by having them cut in the stenographic department and filed and sorted in the mailing department. In such cases the mailing clerk sorts out the stencil mail, i.e., the subscription letters and cards, arranges them alphabetically according to state and name of individual, and then delivers them to the stencil-cutting typists. As the stencils are cut they pass into the receiving tray and are arranged

in a manner just the reverse of that of the subscription cards, from which the stencil names are copied. This reversed arrangement of stencils should be kept when sending them to the mailing department. After the stencils are cut, the letters and cards are stamped "Listed," and delivered to the head stenographer who provides for their final disposal.

Handling the Detail Work of the Department

In a central stenographic department many details pertaining to the work of the department as a whole must be looked after. It would not be consistent with the general idea of specialization which underlies the central department, if the stenographers and typists were required to order their own supplies, collect matter to be typed, schedule their own work, and be responsible for their own inspection. Neither would it be economical to make the head stenographer personally responsible for such detail. Good management, therefore, counsels that all this miscellaneous work be put into the hands of a special detail clerk, but under the authority of the head stenographer.

No exhaustive list of the duties of the detail clerk can be given in a general treatment of the stenographic department, but in each case work of this character should be carefully analyzed and classified. The clerk should know exactly what his duties are. The following list is meant to be suggestive only and can be expanded or modified to suit the individual case.

Keep department in order:

1. Cover and uncover machines.
2. Arrange supplies in supply cabinet in neat and orderly way.
3. Keep department from getting clogged with "out-going" mail, circulars, etc.

Care of supplies :

1. Watch maximum and minimum quantities.
2. Order supplies when limit approaches by—
 - (a) Making out requisitions, daily if needed, and getting head stenographer's O K.
 - (b) Sending original requisition to general supply department.
 - (c) Filing duplicate requisition.
3. Check receipt of supplies against duplicate requisition.
4. Follow up all items omitted from list.

Keep special typists supplied :

1. Distribute lists obtained from advertising department.
2. Collect envelopes and folders from typists and inspect addresses, etc.
3. Stamp lists—date of mailing and piece of advertising sent.
4. Deliver envelopes, folders, and lists to advertising department, so that mailing schedule may be adhered to.
5. Aid head stenographer by notifying her when work for typists is running low or where more help is needed to get work out according to schedule.
6. Change the schedule in case of emergencies due to changes in mailing schedule.

It will be noticed that special emphasis is put upon certain kinds of inspection. This removes the possibility of any great quantity of poorly typed and wrongly addressed circular matter getting into the mails. A conscientious detail clerk can save much money, to say nothing of good-will by this one thing alone. Also, the close watch which he can keep over the use of supplies stops many leaks due to careless-

ness and extravagant use on the part of typists and stenographers.

Summary of Stenographic Supervision

In conclusion to this part of the book a summary is given of the chief lines into which the supervision of the stenographic department falls, as follows:

1. Employing and training stenographers and typists.
2. Assigning work to stenographers.
3. Inspection of work (read over finished work).
4. Assigning work to typists.
 - (a) Form copying for mailing lists.
 - (b) Addressing envelopes, cards, etc.
 - (c) Filling in letters.
 - (d) Handling circular matter.
 - (e) Cutting stencils.
 - (f) Writing up card records.
5. Keeping records of operators.
 - (a) Daily summary.
 - (b) Graphic chart.
 - (c) Schedule of work sheet.
 - (d) Dictation slips of stenographers.
 - (e) Absence slips.
 - (f) Attendance slips.
 - (g) Reminder file.
6. Consulting with office manager concerning:
 - (a) Employment and discharge.
 - (b) Salary changes.
 - (c) Any departure from standard routine instructions.
7. Keeping an assistant trained to distribute work and to assume authority in absence of head stenographer.

8. Distributing mail.
 - (a) Keep department schedule for collection.
 - (b) Check mail schedule of boy from mailing department.
 - (c) See that dictators get letters before lunch time or early afternoon for corrections.
 - (d) Regulate typing schedule in circular campaigns.
 - (e) See that copies of interdepartment memos, of telegrams, of executive letters, and all tickler letters are correctly disposed of.
9. Keeping up-to-date list of initials of typists and dictators.
10. Keeping operators supplied with machines and equipment.
11. Watching conditions of machines and supplies.
 - (a) Operator to clean her machine every morning.
 - (b) Outcalls for repair men.
 - (c) Ribbons should be fresh.
 - (d) Train assistant to watch supply stock.
12. Regulation of ventilation; one assistant to watch conditions.
 - (a) Thermometer to stand at $56-70^{\circ}$ (winter).
 - (b) Open windows and shades.
 - (c) Positions of fans.
 - (d) Registers and ventilators.
13. Keeping chairs properly adjusted.
 - (a) Construct a record showing: name of operator; height of chair.
 - (b) Measurement of chair heights weekly and results entered in the record.
 - (c) Keep chairs adjusted in accordance with measurements.
 - (d) Keep rule for measuring heights.

14. Keeping discipline.
 - (a) See that operators are at desk promptly, morning and after lunch.
 - (b) No stopping until exact moment of closing.
 - (c) See that pressure of work is constant and no loafing.
 - (d) No unnecessary talking and noise.
 - (e) Watch violation of rules pertaining to rest periods.
15. See that all stenographers are furnished instructions.
 - (a) Standard forms of letters, etc.
 - (b) Lists of branch houses.
 - (c) Lists of foreign branches, etc.
 - (d) Helps pertaining to erasures, underscoring, addressing, closing, etc., checking lines, arranging lists in order, and the like.

PART V
THE WORK OF THE BUSINESS
DEPARTMENTS



CHAPTER XX

PURCHASES AND STORES

Need of a Purchasing Department

Many flourishing organizations leave their purchasing work largely to the individual department and the persons therein most conversant with the material, its need, and uses. To do this is on a parity with giving the right of "hire and fire" to each foreman. So long as no serious disarrangement of the daily work of the organization occurs, the practice is permitted, because there is no apparent reason for discontinuing it. Almost any individual or department can, when necessity demands, place orders for material and secure it when wanted, if the market is in a fairly loose condition. Coupled with this, however, is the obligation on the part of whoever does the buying to pay no more than the lowest price which the market offers. This part of the work is not as easy as the mere placing of orders, and in this respect many employees, who are not trained buyers, fail.

Every organization requires some records for future reference or for use in planning its present work. If the buying is left to those who are interested only in the purchase of supplies or materials for special departments, there will be lacking the maintenance of such records of transactions as enable the goods or merchandise to be bought efficiently and quickly. The representative who purchases only occasionally does not always know when a quoted price is reasonable or when the market is due for an advance, nor does he appreciate the difficulty of effecting deliveries or the terms on which the materials should be purchased. Even in dealing with vendors and their representatives, the occasional buyer is at a disad-

vantage. The salesman is primed with the best knowledge of the market, his products, and his competitors. He is a salesman because he has the ability to make the purchaser want what he has to sell. The bigger the purchase, the more capable the salesman, and so the less chance the inexperienced buyer has of meeting the salesman in a fair field. Accordingly specialization in the purchasing work becomes a vital necessity for every large enterprise; a purchasing department should be created to do all the purchasing for the whole organization, and to this department foremen or heads of offices must delegate the right to buy the things they may want.

Responsibility for Good Service

To justify its existence, the purchasing department must get what is wanted, when wanted, and at the lowest possible price. The department should have no authority to alter the purchase requisition without first securing the approval of the requisitioner. If the correctness of his judgment is doubted, or the delivery time of the requisition is questioned, the matter should at once be referred to the originator. If there is any clash of opinions the matter may either be carried to a higher authority or the department must order what is requested.

At the same time, judgment must be used so that there will be no delay or inconvenience to the requisitioner, in case the purchasing department is overruled. The routine of ordering should proceed to the point of actually placing the order, even though the possibility of its later cancellation exists. It must be assumed that the purchase is requisitioned in good faith, that the material ordered is just what is needed, and that the delivery time is just right to fit the requisitioner's schedule. The obligation to secure the lowest market price is a requirement which does not reflect the success of the department as readily as do the other factors of the purchase.

Advantages for Other Departments

So long as the purchasing department does its work as efficiently as the individual purchaser it more than justifies its existence. Prejudice often needs to be overcome against this centralization of buying, but every department should be glad to be freed from the trouble and responsibility involved in looking after its own supplies. If at any time the purchasing department fails to function properly, the department which may feel itself inconvenienced can always appeal to the general executives. The reply of the defendant department will probably be that it did the best that could be done under the circumstances. The complaining department is then obliged to show how better service could have been rendered. Even if the criticism is substantiated in a particular instance, it is not a condemnation of the method, but of the individual action of the department. If the service is not satisfactory, a new personnel must be secured.

Importance of Compiling Proper Records

The success of the purchasing department depends largely upon the records which must be kept for the proper carrying out of the routine of present and future buying. These records will be described later; here the discussion is limited to their scope. Proper records should enable the department to locate any order by vendor, by material, or by order number. Information will constantly be requested by requisitioners regarding the status of orders outstanding and their delivery date, or regarding changes or cancellations. The order must be easily located and the information wanted must be quickly given.

For future buying, the records are largely detailed tabulations of past experience, such as the source of supply of the material, the supplier's co-operation in filling previous orders, and what standard materials can be secured in the market.

In short, the records must tell the story of any past order, and show how to duplicate it. To accomplish this the number of records need not be large if they cross-index each other.

Relations With Outside Concerns

The relations of the purchasing department with outsiders usually take the form of a contract or an agreement for • the delivery of the purchase. Such an agreement should be bound by two ties—a legal and a personal. If in writing the legal rights of the buyer are secured. But the purchasing department also wants service from the supplier, and this is largely a personal matter, measured by the extent to which the supplier considers it expedient to exert himself. He should supply only first-class goods, ship as wanted for delivery, see that the invoice is correct, carefully observe all requests as to markings of packages, and generally conform with the buyer's system of handling purchases. These are all small matters in themselves, but when some half-dozen or more are ignored in one day, the routine of the department is retarded, the clerical work is increased, and the plans of the requisitioner are thrown into confusion.

At times the supplier may not fulfil his obligations according to the legal rights of the buyer, and even so the violation of a part of the contract or the failure to render all service possible may be insufficient to cause the buyer to take the matter to court or even conduct a lengthy correspondence with the vendor in an effort to collect any damages he may have suffered. It should therefore be an underlying idea of the purchasing department's relation with the vendor to make him want to do business with the purchaser.

Friendly Relations an Advantage

Like the sales department, the purchasing department represents the business in its relations with the outside world.

The impression which the buyer makes upon the salesman will govern the action of the vendor. Many thousands of dollars have been saved to buyers by the "tips" of vendors and their representatives upon approaching price changes and market shortages. Such happenings are obviously foreseen best by those handling and dealing with the same products every day. The supplier studies the business methods and judges the progressiveness and the general character of a buyer largely from his correspondence and his method of doing business. This is supplemented by the experience of other concerns which have dealt with him and by the reports of commercial credit agencies. This data is finally completely rounded out by the reports of salesmen who come into personal contact with the buyer or purchasing agent.

The information collected by headquarters is given the salesman before he interviews his prospects and any doubtful points of credit or relations are carefully explained to him before he leaves the office. The majority of salesmen carry a regular form on which to report routine data, such as the name of the person interviewed, his personality and responsibility, apparent prosperity of the concern and its business methods, references, and any other information which he considers might be of use to headquarters or to himself on his next trip. In the case of a business owned by a sole proprietor, inquiry may even be made as to his family, their thrift or apparent disregard of expense, and other details which might impair the credit standing of the customer.

Buyer's Attitude Toward Salesmen

The attitude to be assumed by the buyer toward the salesman can now be seen. When the latter calls he should be welcomed. If at all possible there should be a reception room at the main entrance to the office, with a rug on the floor, and comfortable chairs. The official welcoming agent of the com-

pany should not be an office boy. An older man who appreciates the responsibility and who is friendly, is the ideal representative. Salesmen like to be remembered as having called before. The visitor should be greeted by name and above all not be kept waiting. He is paid for what he accomplishes. Lost time is lost money for him as well as for the purchaser.

The salesman is usually given the right to quote any price and terms down to a certain figure. It is to his employer's advantage to get all he can for his product and make the most profit. If the purchaser wants to buy supplies and materials on terms as good as his competitors, he must influence the salesman to be square and aboveboard. The permanently profitable way for the purchaser is to state what he wants and not waste time beating about the bush.

It is best to speak well of the salesman when writing his house, and to have such orders as are sent direct to the house credited to him. By showing him that the business of the firm can be secured in fair competition on the basis of price, quality, and service, and that he will have no long wait or other difficulties in securing payment—in short by cultivating his friendship in every honorable way, the salesman will be led to regard the buyer as a valuable customer.

Gratuities should never be accepted. A buyer who must receive financial remuneration when transacting business for his house and who sells out to the highest bidder, can never be depended upon.

The Investigation of New Materials

As a rule the purchasing department will be the first department to know of improvements in material, equipment, and supplies. Salesmen are always ready to call the buyer's attention to any improvement in the product offered for sale and sometimes will even mention a rival's improvement. Early announcement is made in trade papers of new inven-

tions and the suppliers soon have a representative interviewing every possible prospective purchaser. As this information is gathered it should at once be referred to the person most interested. A report of his opinion should be demanded, and this report forwarded to the producer as a matter of courtesy.

It will be well for the purchasing department to watch these reports carefully. Whenever possible the authority to whom the suggestion is referred should be an authority who directs the use of the old standard, rather than the user himself. Except in very rare cases, every buyer of a material is prejudiced in favor of the material he is using at the present time. He may have handled it for a long time and be an expert in its use. A new material probably must be experimented upon before the maximum result can be secured. That means trouble and temporary loss in productiveness which is hated by every easy-going operator willing to "let well enough alone"; or the present choice may have been one of his own selection. A change strikes at his personal pride and judgment or at some even more personal interests. But the higher up or more intelligent the authority asked to decide on substitution, the more likely will be the accuracy of the judgment. Then when put into operation, it becomes a make-or-break process.

No matter how small the saving the new object may cause, it should be carefully investigated for merit. Should the notice of the material be received by mail, the person distributing should first of all call it to the attention of the buyer for his information and knowledge. He should also know the result of its trial in order to inform the producer intelligently of the reason for the rejection of the article. It may be because of conditions of manufacture; the article may have no merit; or it may be unsuitable for the use in the buyer's product. The producer, by knowing the facts, may be able to

alter his proposition and make it acceptable to the buyer, and so he must know wherein it fails.

Knowledge of Business Conditions

The nature of the information as to supply and demand and their resultant, the price of a standard material, may be of two kinds—general and specific. Only the big general data are used for the information of the executive. When the question arises, "Is this the best time to contract for that material for next year?" the purchasing agent does not call for the detail price record, he wants something big, something which tells him the general condition of the market. Is business stagnating, or is it going up with advancing prices which promise to soar for months in the future? If this particular material is brass, he wants to know whether the prospect is that more brass will be on the market than is likely to be wanted, or whether the demand will be greater than the supply. It is a guess, a gamble, which he has to make, and he doesn't dare to rely on an impression or on any single "tip." His supplier is likely to tell him one thing, a commercial reporting agency, another, and so on; he will find as many opinions as the number of sources he seeks. So he wants the data of all factors which are influencing the market reaction on that material. General business conditions will largely tell what the demand will be. The amount that will be purchased will depend upon the price at which it will be produced. For example, brass is a combination of several elements, chief of which are copper and zinc. The cost of brass then will vary proportionately as the cost of the metal used in its production increases or decreases the total cost of production. Thus, if copper is about to increase 20 per cent in cost and the copper during the past year has cost 60 per cent of the entire cost of the brass, it is reasonable to believe that the brass for the next year will increase proportionately in price.

Study of Statistics

Thus the purchasing agent and his advisers discuss in conference the statistics which demonstrate the market tendency. On the basis of their decision, the requirements for the coming year will or will not be covered by a contract. It is not practical to carry out such detailed data for every material purchased. Statistics will be maintained only on a base item. The controlling decision will then be made on a multitude of small items. Take, for instance, castings or small hardware. Castings are made of iron and will follow in price very closely the same variations as iron. Group action is taken covering all of the items belonging to that particular class.

Most large concerns have a statistical department, the members of which are specialists in methods of presenting facts in tabular form and by graphs. The facts wanted by the purchasing department lend themselves to easy presentation by graphic methods. Should there be no statistical department, usually one clerk is delegated to that kind of work, because of the skill required to interpret and keep the record. The keeping of the record—picking out the specific data from daily papers and noting on the sheet the causes of movements—becomes mere routine.

Essentials of a Purchase Order System

Be the organization large or small, the following features are necessary for the proper carrying on of the purchasing function:

1. A purchase order.
2. Inspection and count of goods before the bill is paid.
3. Ready answers to the questions:
 - (a) Have the goods been ordered?
 - (b) From whom ordered?

- (c) Price last paid when an order was given.
- (d) Have goods been received?
- (e) When were goods received?
- (f) Has bill been paid? When?
- (g) What amount of goods is carried during certain periods?

A simple picture of an elementary purchase order system will explain the nature of the activities involved (See Figure 40).

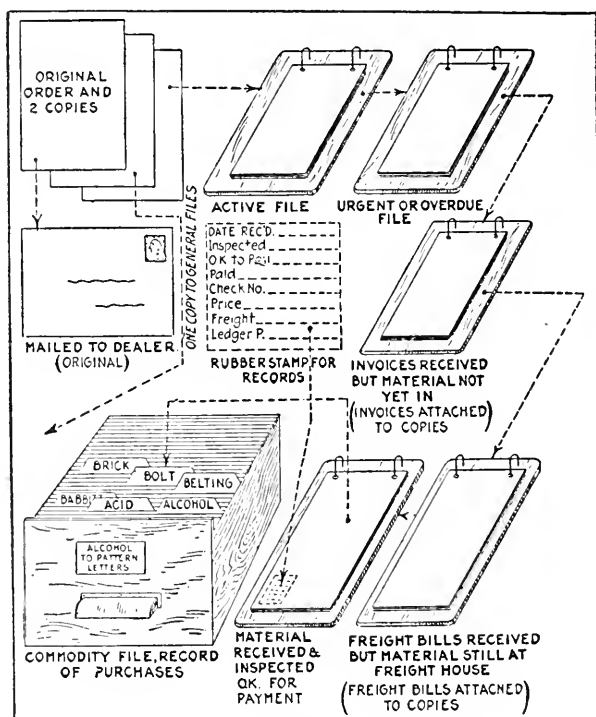


Figure 40. Purchase Order System

A simple purchase order system showing the disposition of the various copies. (Taken from "Machine Shop Management," by John H. Van Deventer, M.E.)

Method of Requisitioning Supplies

An analysis of the following system of a prominent trust company in New York shows that variation is in detail and not in principles. The major functions of the purchasing department of the company under consideration are purchasing and stores-keeping, although the printing department has been put under its control. The company uses and carries in stock large quantities of office supplies. A general requis-

G. P. D.

REQUISITION FOR SUPPLIES

TRUST COMPANY OF NEW YORK

New York, September 12, 1918

Please deliver supplies listed herein to B. Jones of Credit Dept. 2

AMOUNT WANTED	FORM NO.	DESCRIPTION	CHECK	COST	MEMO.
2		Steel Legal Size Filing Cab.			

This requisition must be delivered to Supply Department before 3 p.m.
week days or 11 a.m. Saturdays

No supplies will be furnished without a requisition properly signed

Received by _____

No. 412

F. B. Brown,
HEAD OF DEPT.

Figure 41. Requisition for Supplies

The supplies required are designated on the above requisition by means of a symbol, thus insuring accuracy in ordering or delivering from stock.

tion form (Figure 41) is used, on which the supplies required by a particular department are described in writing and designated by a symbol—in this case “G. P. D.” Every kind of supply is symbolized so that requisitions can be filled accurately—a thing which is not always possible when the purchasing and stores department is guided by a written description only.

This form of requisition can be filled out by anyone in the organization, but it must always be O K'd by the department head, and in case of special items, such as fountain pens, adding machines, etc., the requisition must be countersigned by the chief clerk also.

Requisitions are made out in duplicate by the various departments and each new order is numbered serially. The original copy of the requisition is sent to the purchasing department, while the duplicate is kept by the requisitioner.

Placing Orders for Supplies Not Carried in Stock

Upon receipt of the requisition, if the supplies are not carried in stock, the purchasing agent looks up his material file (in which the particular supply wanted is filed by its symbol) to see where he can make the purchase to the best advantage. This file (Figure 43) lists not only all the different kinds of supplies carried in stock, but any material that may have been ordered to meet special needs, such as desks, typewriters, electric fans, inkwells, etc. Each item is given a separate card, which shows all the companies from whom bids have been received; the name of the last successful bidder is followed by the initials of the purchasing agent to make it stand out from the others.

If there has been little or no fluctuation in market prices during the period, the purchasing agent at once places the order with the last successful bidder. But in case there have

When the bidders return these forms with the quotations of prices entered in the column supplied for that purpose, the bids are entered on the form shown in Figure 43 and name of the successful bidder initialed as described above. The goods are then purchased following the method as explained in the next section.

Figure 42. Request for Quotations

This form is sent to suppliers with a request for quotations. After its return it is filed for future reference under its symbol letters.

department can make its departmental cost distributions by the same symbols.

G. P. D.			
Original Order Blank No. <u>2-412</u>			
New York, _____ 191			

We hereby order as follows:			Price
Approved _____ Chief Clerk		No expenditure will be recognized unless ordered on this form. <div style="text-align: right; margin-top: 10px;"> TRUST COMPANY OF NEW YORK Per _____ Purchasing Agent </div>	

Figure 44. (a) Purchase Order (Original)

This copy (white) goes to the vendor.

Following Up Orders

It will be recalled that requisitions are made out in duplicate, the original going to the purchasing department where it is filed by department number, and the duplicate remaining with the department and used as a tickler. If the department later wishes to know where a certain order is, it calls up the purchasing department, gives the symbol of the supply and the

G. P. D.			
Duplicate Order Blank No. <u>2-412</u>			
Send immediately to Auditing Department			
New York _____ 191			
We hereby order as follows:			Price
Approved _____		Department ordering _____ Account to be charged _____ _____	

Figure 44. (b) Purchase Order (Duplicate)

This copy (pink) goes to the auditing department.

serial number of the requisition. The purchasing clerk needs only to look in the open file and pick out the order in question. Each day the purchasing department goes through this open file and takes the orders that should arrive on that date. When goods do not come in according to schedule, the orders not received are placed in a tickler according to date, as a means of follow up. It may be noted that where orders are numerous, a separate tickler file would obviate the necessity of going through all the orders every day.

G. P. D.			
Triplicate Order Blank No. <u>2-412</u>			
Supply Department Copy			
New York, _____ 191			
<div style="display: flex; justify-content: space-between;"> We hereby order as follows: Price </div>			
Checks _____	Department Ordering _____ Account to be charged _____ _____		
Letter H _____			
Bid Env. _____			
Shipping Bk. _____			
Checked by _____			
Form No. _____			

Figure 44. (c) Purchase Order (Triplicate)

This copy (blue) is retained by the purchasing department and filed first by department, and later by date, if the goods do not arrive on time.

The Receipt of Goods

Upon receipt of the goods the store clerk notes the departmental order number on the vendor's invoice, goes to the open file in the purchasing department and picks out the triplicate (blue) purchase order. He O K's this to show that the goods have arrived. The clerk goes next to the requisition file where he identifies the proper requisition by the same order number. He now sends the goods, accompanied by the

requisition, to the proper department. Here the requisition is signed by the person receiving the goods and returned to the purchasing agent as his receipt. The requisition is once more filed according to the department concerned in proper numerical order, and kept until the end of the month when a summary of the requisitions for each department is made and the totals sent through as a debit to the accounting department. This debit memo constitutes the monthly departmental expense charge.

Paying for the Goods

As soon as the invoice is checked up as correct, it is sent to the accounting department where it serves as a notice to pay the bill. A clerk here goes to the file containing the pink order copies and selects order number 2-412 and from it verifies the bill.

The Stores Department

The stores room of the company is well lighted and well arranged. The compartments for the stock are steel cabinets with glass doors, each containing about three shelves. So far as possible the stores peculiar to each department are kept in a cabinet marked with the department number and the symbol of the stores.

The stores department until recently was organized as a general supply depot. It is still centralized as to location, but each department is assigned cabinets which carry ten days' supplies. These departmental cabinets are in immediate charge of a departmental stores clerk responsible to the purchasing agent, who himself inspects the cabinets weekly. In each department cabinet is a folder containing all the forms in use by that department. The forms are mounted on heavy cardboard so as to facilitate handling. They are marked with their symbols for purposes of identification and this

symbol together with the section and shelf symbols is rubber-stamped on the cardboard. This aids in the location of the stores, although the stores clerk in time becomes familiar with the location of the various items. The value of this record is very great when changes occur in the personnel of the stores room. For example, the bond department sends for "Form F. R. D." The stores clerk goes to the department cabinet, looks in the folder, and discovers that the supply wanted is a pad of "telephone and memo" slips, which is in section 3, shelf 1.

Handling Requisition Slips on Stores

When any department orders supplies regularly carried in stock, it makes out the requisition in duplicate, and the same procedure is followed as in the case of special supplies already described. The two copies are sent to the purchasing department. Here one copy is retained and the other forwarded to the stores room, where the order is filled. The stores copy is sent with the supplies to the department where it is signed and sent back to the purchasing agent, who files it numerically by departments until the end of the month, when all these departmental slips are totaled and entered as a monthly departmental charge.

Keeping Track of Stock

The company designates a maximum and minimum stock to be kept on hand of each class of stores. Its method of handling this system is interesting. The minimum quantity which it is thought desirable to carry is tied into a bundle and the following form attached to it.

Thus, if the minimum stock of No. 2 pencils is three boxes, this number of boxes will be tied together and the form shown in Figure 45 attached to it. When the stores clerk is compelled to break into this bundle he sends the form

G. P. D.			
Dept. Supply _____			
Description _____			
Max. Stock _____		Min. Stock _____	
Date _____	On hand _____	Date _____	On hand _____

Figure 45. Stock Slip

This stock slip gives the maximum and minimum quantities of the kind of supply designated by the symbol, which are to be kept on hand.

to the purchasing agent who orders more goods in the regular manner. The card is returned to the stores room where it remains until the new goods arrive. No attempt is made to subtract issues of stock on this card, and when new stock comes in the amount remaining on hand is stated and the new amount added.

Standardizing Supplies

Three sources of loss in every large stores department are:

1. Falling off of quality or deviation from standard requirements.
2. Overstocking.
3. Running short of supplies.

The first of these problems is met by the company under consideration by the use of a "Maintenance and Description Card" (Figure 46).

This form was devised by the standardization committee consisting of the purchasing agent, auditor, chief clerk, and a department representative, after a consideration of the problems involved. It will be noticed that no attempt is made to record changes in stock due to issuing of stores, but emphasis is placed on the various points likely to be slighted in

[illegible]

Figure 46. Maintenance and Description Card

An inventory card which shows the quantity on hand of the particular kind of supply designated by the symbol, as well as quality and other descriptive data.

Maximum.....			Minimum.....							
1.			2.			3.				
REQUIREMENTS NOT COVERED BY PURCHASE ORDERS			BALANCE ON ORDERS, BUT NOT YET RECEIVED			TOTAL BALANCE ON HAND IN STOCKROOM				
Required for 1918	Quantity	Date Ordered	Date Ordered	Purchase Order No.	Quantity	Date Received	Date Received	Purchase Order No.	Quantity	Date Issued
X H 21	50,000	.....	3/23	3843	25,000	.....	9/11	3843	15,000	.....
.....	25,000	3/23	.....	.....	15,000	9, 11	.....	.....	5,000	9/18
.....	25,000	.....	.....	.....	10,000	.....	.....	.....	10,000	.....

Figure 47. Stock

A stock record which provides for a continuous record from the time

checking up the qualities and other requirements necessary to give satisfaction. From this card the purchasing agent can check up a printer and see that he has delivered paper of the correct size and form, weight or color, whether it is ruled in red or black ink, and whether or not it is perforated, punched, padded and numbered, and the like. While this card does not maintain a complete record of the balance of stores and does not check losses due to over- and under-stocking, it does prove a good check on the vendor. Also because of its convenient size the record is easy to handle. These cards are filed in two ways: for stores carried in stock, they are filed by departments first and then by the symbol of the particular supply which they represent; for stores not carried regularly in stock, they are filed by the individual items which they represent, such as, adding machines, typewriters, waste paper, booklets.

Balance of Stores Records

While this company does not think it necessary to keep a record of the value and of the balance on hand of its office

Kind of Material.....											
4. AMOUNT RESERVED FOR PRODUCTION ORDERS ISSUED				5. BALANCE AVAILABLE FOR NEW PRODUCTION ORDERS			6. DELIVERIES TO THE SHOP				
Date	For Order No.	Quantity	Date Issued	Date	Quantity	Remarks	Date Issued	Quantity	Shop Order No.	Part No.	
9/15	9842	10,000	.....	9/11	15,000	.....	9/18	5,000	9842	X H 21	
.....	.....	5,000	9/18	9/15	10,000	.....	.....	.....	.....	.....	.....
.....	.....	5,000	.....	.....	5,000	.....	.....	.....	.....	.....	.....

Record

the specifications are received until the material is delivered to the shop.

stock, this record should not be overlooked by other concerns.

The principle as worked out in connection with factory stock-keeping is easily adapted to office conditions as well. In every stores-keeping system there are six essentials around which the records are constructed, namely:

1. Requirements not covered by purchase orders.
2. Balance on orders, but not yet received.
3. Total balance on hand in stock-room.
4. Amount reserved for production orders issued.
5. Balance available for new production orders.
6. Deliveries to the shop.

The variation in the type of records kept must depend upon factory conditions and organization, but in whatever form they are developed they must provide for at least the six basic factors named. If these six be condensed into one record, it will have a form such as shown in Figure 47.

It is estimated that the requirements for x-H₂I are 50,000 lbs. This amount is entered in column 1, as shown. When 25,000 lbs. are ordered from the mill, 25,000 is added to

column 2 and deducted from column 1. Fifteen thousand pounds received are added to columns 3 and 5, and deducted from column 2. Ten thousand pounds reserved for production orders are added to column 4 and deducted from column 5. Five thousand pounds delivered to the shop are added to column 6 and deducted from columns 3 and 4.

A plan of this kind provides for a continuous record from the time the specifications are received from the engineering department and the probable sales estimated, until the material is delivered to the shop.

It is evident that this routine can only be developed through close co-operation with the stores department, which, in conjunction with the receiving and inspection divisions, is largely responsible for the data in columns 2, 3, 4, 5, 6. One point in this connection is especially worthy of mention, namely, that stock cards be provided to hang over each bin or pile, and that the balances on these cards be reported whenever material is received or delivered, as a check on the central stores ledger.

CHAPTER XXI

THE WORK OF THE TRAFFIC DEPARTMENT

Reason for Existence

The traffic department is a comparatively new division of the business organization. Many of its functions, when traffic conditions were not so complicated, were performed in a more or less competent manner by shipping and receiving clerks. But today the constantly increasing number and complexity of the tariffs, rulings, and regulations issued by the various railroad companies, make it almost imperative for a concern of any size to employ men specially trained in traffic problems to handle this branch of the business.

To illustrate the complexity of the subject—tariffs, rulings, and regulations filed by the railroads every day cover about 600 pages of printed matter. There are 23,000 different classifications of goods, due in a great measure to the fact that freights are classified as much according to the method of packing and description as to the character of the goods. These varying ways of classification often cause one article to be entered under several headings.

Many firms have found, through the audit of a traffic expert, that detection of errors and overcharges, which occur in the absence of efficient control, more than paid for the salaries and other expenses of maintaining a traffic department. No office manager, shipping or receiving clerk can, in addition to his regular duties, give the necessary time and study to keep him always informed of many changes and variations in traffic conditions.

Traffic management is now as much a distinct branch of business organization as any specialized commercial activity,

and practically every concern of any size finds it greatly to its advantage to establish a department of this kind.

Service of Traffic Department

Railroad clerks cannot be expected to quote rates on all sorts of articles, shipped to points distributed over the whole country, without making mistakes; nor have they the time to search for the best routing. Should they attempt to do the routing and classifying for each shipper, delay and confusion would result. On the other hand, traffic departments, by concentrating on the comparatively limited number of products shipped by their concern, to such points only as are covered by the location of its customers or its source of supply, have a much better opportunity for looking up the best rates and ascertaining the most economical methods of shipping goods.

The item of transportation is often an important factor in the cost of goods, and competition in many industries makes necessary a close watch on its costs. Then again, service is usually a strong selling argument, and delayed shipments, through poor routing and follow-up, are frequently a cause of loss of trade. Many large concerns selling to retailers have to protect their customers against excessive railroad charges, even when the goods are sold f. o. b. the point of origin. Thus the service of the traffic department is not limited to the handling of railroad claims for its own concern, but it often is called on to perform the same function for the customers of the business.

Relation to Other Departments

Where a traffic department exists, the shipping clerk leaves all matters requiring specialized knowledge and judgment to be settled by the department and simply follows instructions covering the handling of goods. For instance, when he receives a consignment, he marks it as designated on the ship-

ping ticket, and routes it in accordance with the policies and rules indicated thereon. He expects to be furnished with adequate instructions regarding the loading of car shipments, etc., from the traffic department and he works accordingly. The receiving clerk's functions are based on the same authority. All movement of goods outside of the building is planned and carried out solely by the traffic department.

The sales department is interested in the cost of transportation for the purpose of price-fixing and for making quotations. It must also know the time required to move goods to certain districts, so as to advise customers when necessary, and thus enable them to foresee their requirements and prevent shortages in case of lost or delayed shipments.

If a concern sells a product f. o. b. destination, prices must be based upon transportation costs, and territories laid out accordingly. If the goods are sold f. o. b. factory, the shipment must be correctly described, routed, and billed so as to prevent overcharging the customer. Some concerns allow freight on the basis of the lowest rate, charging the difference to the customer if a routing is selected which necessitates higher rates or if quick delivery is desired. In the latter case the customer, as a rule, pays the difference between freight and express. Often a light shipment can be sent by express at a very slight advance in cost over freight with of course a considerable gain in time. Thus it is the duty of the traffic department to know when the weight of a shipment makes express advantageous.

The purchasing department in considering quotations must investigate rates and the length of time it takes to move goods before placing an order. This means frequent consultations with the traffic department.

There are many occasions when some special need demands the quick movement of freight, and the average purchasing agent does not have the special knowledge required

to handle such matters. If goods are bought f. o. b. point of origin, shipping instructions should be given. Badly routed over a long distance, the freight charges on a raw product or on inexpensive materials may equal or even exceed the cost of goods.

Functions of the Traffic Department

The functions of the traffic department revolve around the orders taken by the sales department or issued by the purchasing department. These are respectively referred to as "outbound" or "inbound" shipments. In general the duties of the department may be concisely stated as follows:

1. To gather and maintain data files relative to shipping conditions which affect the business.
2. To secure the lowest rates and best service.
3. To prevent shipments being delayed in transit.
4. To verify and check all transportation expense bills.
5. To file all necessary shipping claims and look after adjustments.

The traffic manager must know how to determine the legal charges on shipments, to ascertain the reasonableness of these charges, to dispatch goods to their destination via the quickest routes, to reduce losses and damages to a minimum, to organize and manage his own department economically, and finally he must oftentimes study rates and their adjustment with a view to aiding the development of business in highly competitive territories.

The complexity of detail involved in the work of a traffic department may be realized by the following facts concerning a large mail-order house.

This particular concern obtains goods from manufacturers in over 2,000 towns and ships goods by freight to a list of customers distributed over 12,000 towns. The work is

further complicated since not all outgoing shipments are made from one place, but originate from more than 1,000 factories. In order properly to check and quote rates on all these shipments, the traffic department maintains a tariff file of over 4,000 separate issues.

Filing and Classification of Tariffs and Tariff Data

A careful, and withal simple, method of filing tariffs and other traffic information is essential. This should be kept up to date so that dependable information as to rates is at hand and correct instructions for packing, description, and routing may be promptly given. Because of the great number issued, it is neither necessary nor practicable to file all tariffs. A file covering the shipping points likely to be used is generally sufficient for most businesses.

Inexpensive elastic binders should be used for the various tariffs, so that they can be inserted and removed with ease and rapidity. Each binder should have a label showing the shelf number where it is to be filed and the tariff it contains.

Tariffs may be conveniently classified into two groups as follows:

1. Tariffs issued by railroads.
2. Tariffs issued by agents, associations, and committees.

These two groups may be subdivided into:

1. Classifications.
2. Exceptions to classifications.
3. Tariffs giving rates.
4. Switching and switching absorption.
5. Special privilege tariffs, such as milling in transit, storing in transit, reconsigning, etc.
6. Miscellaneous, such as weighing, refrigerating.
7. Demurrage rules.

8. Territorial directories.
9. Station lists.

The two main groups may be given a separate and distinct file and arranged alphabetically according to agent or road.

Card Index File of Traffic Data

If shipments are to be made frequently to the same customers, and especially if combination rates have to be figured, a card index file will be found a labor-saving device. This file is not supposed to do away with the ordinary tariff file, but is simply a convenient transcript of the information in constant demand. It will prevent waste of time in doing the same thing over and over again and cut down the time required in figuring combination rates and in hunting up authorities. When the freight bills are to be checked expert knowledge will not be required as an ordinary clerk can do it with the aid of this file.

The cards should show the rates, how the shipment is made up, the authority, the routes via which the shipment is made, and so on. To keep the file up to date, it is only necessary to scan the tariffs as they come in, for changes which affect these rates. As shipments are often received from the same firms, similar methods can be followed with the inbound shipments.

Composition of Freight Rates

Freight rates are not all printed in one book where any rate can be found from "anywhere to anywhere," but each railroad publishes a number of so-called tariffs which apply, usually, to their own lines only, or perhaps to some points on a few other lines. There are also "joint issues" published by several lines which amalgamate and give composite rates to

and from and between points on each other's roads. In using the various tariffs there are three main features to be taken into consideration:

1. Description, which includes class or commodity name, material composing article, purpose or use of article (finished, unfinished, raw, damaged, or scrap), tariff classification and value of article.
2. Size and weight, which includes method of packing, etc.
3. Point of destination, such as points within the same state, interstate shipments, same classification territory, another classification territory, etc.

Each of these points requires separate discussion. With regard to the first, the railroads charge the highest rate that the description given to them on the bill of lading warrants. A mixed shipment will take the rate of the article in the shipment carrying the highest rate. If the description on the bill of lading is vague and in general terms, the railroad clerk applies the highest rate permissible. The traffic manager who knows his business can so describe the article as to obtain a lower rate because of some specific designation. This must be done, however, without misrepresenting the goods. Often a shipment can be so divided that a fractional part goes by a higher rate, the main shipment taking a lower rate; whereas if it were sent as one shipment under a general term, the higher rate would be applied to the whole shipment.

The second consideration of size, weight, and packing, is best illustrated by the car-load minimum. Thus, in one classification a certain liquid in carboys, boxed, has a car-load minimum of 24,000 lbs., and takes the fifth class. If shipped in barrels or in iron drums, the car-load minimum is 36,000 lbs. The same commodity, when shipped in less than car-load lots, takes a lower rate, viz., third class. Shipments set

up or knocked down, crated or boxed, nested or unnested, take a different rate according to method of packing.

The third consideration, which influences rates, is the point of destination. Mileage is not always the criterion. Competition between railroads or with water transportation often makes the longer distance sometimes cheaper. Thus, the rate to San Francisco from New York is lower than to a point 100 miles inland, although the train that carries the freight to San Francisco stops at this point on the way there. Then again, many shipments originate in one classification territory and end in another, with the consequence that they are subject to different rates if not described with a view of obtaining the lowest rate in both classifications. Thus, a shipment of tissue wrapping paper from Albany, N. Y., to Des Moines, Iowa, is subject to the official classification up to the Mississippi River, but takes the Western classification beyond. If it should be billed as "tissue paper," it will take the third-class rate to the Mississippi River but the second-class beyond. However, if the description on the bill of lading reads "tissue *wrapping* paper," it will be carried the entire distance at the third-class rate.

Packing and Marking

Perhaps the rules that are posted in the shipping room of one concern cover the principal cautions that should be taken in preparing goods for shipment.

1. Pack and prepare your shipments so that the probabilities, not the possibilities, are that the contents will arrive at destination in good order.

2. Pack freight as though you were shipping it to yourself and needed to use the contents just as soon as the container reached destination. Poor containers are a big factor in loss and damage.

3. Mark the package plainly. Two tags are better than

one, but one securely fastened tag is better than two insecurely fastened.

4. Remove all old marks on the package. Many shipments go astray because of improper markings, causing confusion, delay, and inconvenience to the railroad, the shipper, and the consignee.

5. Deliver freight before the rush hours, wherever possible, so that a better opportunity of checking up the marking may be provided. The railroad receives most of its package freight during the afternoon, especially during the last one or two hours before closing time. If the marking does not agree with the shipping papers, there is great risk that the errors may not be detected during the rush hours. Even if the error is detected before the shipment moves, a whole day may be lost—often an important matter.

6. When classifications are received, study them carefully. The same articles do not always take the same classification. Certain articles are placed in a lower class if boxed than they are if crated. The difference in packing cost is frequently much more than offset by the saving resulting from lower freight rates.

7. The classification is also sometimes determined by the manner in which the goods are described. Select the description that will insure the most favorable rates.

Notice of Arrival, Freight Bill, and Delivery Receipt

These papers are in most cases made out at one writing by the railroad agent as soon as freight is received at the station. Each contains a record of the way-bill which accompanies the freight, a description of the shipment, and a statement of the amount of the charges. The first paper sent out is the notice. The cartman, or receiving clerk, signs the delivery receipt when the goods are received. The freight bill is either presented to be paid when the goods are delivered or

else sent to the firm in accordance with arrangements already made.

Handling Bills of Lading

The bill of lading is both a contract between the railroad and the shipper, and a receipt which is signed by the freight agent and the shipper, or his representative. It is usually provided by the railroad, but large shippers often present their own bills of lading for the signature of the agent.

Bills of lading are of two kinds, namely, the "straight" and the "order." The order bill of lading is negotiable and is drawn to the shipper's order. This prevents the railroad from delivering the goods to the consignee until it is properly indorsed and the consignee has paid for the goods or made other satisfactory arrangements with the bank through which the papers are passed. The order bill of lading is made out in triplicate, consisting of an "original," a "memorandum" copy, and a "shipping order." The latter is retained by the freight agent. To avoid errors the original or negotiable copy is issued on yellow paper and the memorandum and shipping order copies are issued on blue paper.

The straight bill of lading is not negotiable and is made out to the name of the consignee. All the copies are printed on white paper. Both kinds of bills give the number of packages, description of the goods, the weight, freight rates, charges to be collected, advances made, amount prepaid, name of consignee and destination, name of shipper, shipping point, route, car number, and signature of freight agent. Both are similarly printed on the back, that is, the contract provisions are the same. The form of a straight bill of lading is shown in Figure 48.

In making out bills of lading proper instructions should be given, regarding the showing of shipper's and consignee's name in full; in general they should be executed with the

<h2 style="margin: 0;">Pennsylvania Railroad Company</h2>									
STRAIGHT BILL OF LADING—ORIGINAL—NOT NEGOTIABLE								Shippers No. _____ Agents No. _____	
RECEIVED, subject to the classifications and tariffs in effect on the date of issue of this Original Bill of Lading.									
at _____								191 _____	
from _____ the property described below, in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned and destined as indicated below, which said Company agrees to carry to its usual place of delivery at said destination, if on its road, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed, as to each carrier of all or any of said property over all or any portion of said route to destination, and as to each party at any time interested in all or any of said property, that every service to be performed hereunder shall be subject to all the conditions, whether printed or written, herein contained (including conditions on back hereof) and which are agreed to by the shipper and accepted for himself and his assigns.									
The Rate of Freight from _____									
to _____ is in Cents per 100 Lbs.								IF Special Per _____ IF Special Per _____	
If Through	If 1st Class	If 2d Class	If Rule 25	If 3d Class	If Rule 26	If Rule 28	If 4th Class	If 5th Class	If 6th Class
(See Address—Not for purpose of Delivery)									
Consigned to _____									
Destination _____ State of _____ County of _____									
Route _____ Car Initial _____ Car No. _____									
No. PACKAGES	DESCRIPTION OF ARTICLES AND SPECIAL MARKS				WEIGHT (Subject to Certificate)	CLASS OR RATE	CHECK COLUMN		
							If charges are to be prepaid, write or stamp here. "To be Prepaid." Received \$ _____ to apply in prepayment of the charges on the property described hereon. Agent or Cashier _____ Per _____ (The signature here is not valid unless the account prepaid.) Charges Advanced: \$ _____ Shipper _____ Per _____ Agent.		
(This Bill of Lading is to be signed by the shipper and agent of the carrier writing same.)									

Figure 48 (a). Straight Bill of Lading (face)

This bill of lading is made out to the name of the consignee and is not negotiable.
See following pages for contract provisions printed on back.

CONDITIONS

Sec. 1. The carrier or party in possession of any of the property herein described shall be liable for any loss thereof or damage thereto, except as hereinafter provided.

No carrier or party in possession of any of the property herein described shall be liable for any loss thereof or damage thereto or delay caused by the act of God, the public enemy, quarantine, the authority of law, or the act or default of the shipper or owner, or for differences in the weights of grain, seed, or other commodities caused by natural shrinkage or discrepancies in elevator weights. For loss, damage, or delay caused by fire occurring after forty-eight hours (exclusive of legal holidays) after notice of the arrival of the property at destination or at port of export (if intended for export) has been duly sent or given, the carrier's liability shall be that of warehouseman only. Except in case of negligence of the carrier or party in possession (and the burden to prove freedom from such negligence shall be on the carrier or party in possession), the carrier or party in possession shall not be liable for loss, damage, or delay occurring while the property is stopped and held in transit upon request of the shipper, owner, or party entitled to make such request; or resulting from a defect or vice in the property or from riots or strikes. When in accordance with general custom, on account of the nature of the property, or when at the request of the shipper the property is transported in open cars, the carrier or party in possession (except in case of loss or damage by fire, in which case the liability shall be the same as though the property had been carried in closed cars) shall be liable only for negligence, and the burden to prove freedom from such negligence shall be on the carrier or party in possession.

Sec. 2. In issuing this bill of lading this company agrees to transport only over its own line, and except as otherwise provided by law acts only as agent with respect to the portion of the route beyond its own line.

No carrier shall be liable for loss, damage, or injury not occurring on its own road or its portion of the through route, nor after said property has been delivered to the next carrier, except as such liability is or may be imposed by law, but nothing contained in this bill of lading shall be deemed to exempt the initial carrier from any such liability so imposed.

Sec. 3. No carrier is bound to transport said property by any particular train or vessel, or in time for any particular market or otherwise than with reasonable dispatch, unless by specific agreement indorsed hereon. Every carrier shall have the right in case of physical necessity to forward said property by any railroad or route between the point of shipment and the point of destination; but if such diversion shall be from a rail to a water route the liability of the carrier shall be the same as though the entire carriage were by rail.

The amount of any loss or damage for which any carrier is liable shall be computed on the basis of the value of the property (being the bona-fide invoice price, if any, to the consignee, including the freight charges, if prepaid) at the place and time of shipment under this bill of lading, unless a lower value has been represented in writing by the shipper or has been agreed upon or is determined by the classification or tariffs upon which the rate is based, in any of which events such lower value shall be the maximum amount to govern such computation, whether or not such loss or damage occurs from negligence.

Claims for loss, damage, or delay must be made in writing to the carrier at the point of delivery or at the point of origin within four months after delivery of the property, or, in case of failure to make delivery, then within four months after a reasonable time for delivery has elapsed. Unless claims are so made the carrier shall not be liable.

Any carrier or party liable on account of loss of or damage to any of said property shall have the full benefit of any insurance that may have been effected upon or on account of said property, so far as this shall not avoid the policies or contracts of insurance.

Sec. 4. All property shall be subject to necessary coöperation and baling at owner's cost. Each carrier over whose route cotton is to be transported hereunder shall have the privilege, at its own cost and risk, of compressing the same for greater convenience in handling or forwarding, and shall not be held responsible

Figure 48 (b). Straight Bill of Lading (reverse)

for deviation or unavoidable delays in procuring such compression. Grain in bulk consigned to a point where there is a railroad, public, or licensed elevator, may (unless otherwise expressly noted herein, and then it is not promptly unloaded) be there delivered and placed with other grain of the same kind and grade without respect to ownership, and if so delivered shall be subject to a lien for elevator charges in addition to all other charges hereunder.

Sec. 5. Property not removed by the party entitled to receive it within forty-eight hours (exclusive of legal holidays) after notice of its arrival has been duly sent or given may be kept in car, depot, or place of delivery of the carrier, or warehouse, subject to a reasonable charge for storage and to carrier's responsibility as warehouseman only, or may be, at the option of the carrier, removed to and stored in a public or licensed warehouse at the cost of the owner and there held at the owner's risk and without liability on the part of the carrier, and subject to a lien for all freight and other lawful charges, including a reasonable charge for storage.

The carrier may make a reasonable charge for the detention of any vessel or car, or for the use of tracks after the car has been held forty-eight hours (exclusive of legal holidays), for loading or unloading, and may add such charge to all other charges hereunder and hold such property subject to a lien therefor. Nothing in this section shall be construed as lessening the time allowed by law or as setting aside any local rule affecting car service or storage.

Property destined to or taken from a station, wharf, or landing at which there is no regularly appointed agent shall be entirely at risk of owner after unloaded from cars or vessels or until loaded into cars or vessels, and when received from or delivered on private or other sidings, wharves, or landings shall be at owner's risk until the cars are attached to and after they are detached from trains.

Sec. 6. No carrier will carry or be liable in any way for any documents, specie, or for any articles of extraordinary value not specifically rated in the published classification or tariffs, unless a special agreement to do so and a stipulated value of the articles are indorsed hereon.

Sec. 7. Every party, whether principal or agent, shipping explosive or dangerous goods, without previous full written disclosure to the carrier of their nature, shall be liable for all loss or damage caused thereby, and such goods may be warehoused at owner's risk and expense or destroyed without compensation.

Sec. 8. The owner or consignee shall pay the freight and all other lawful charges accruing on said property, and, if required, shall pay the same before delivery. If upon inspection it is ascertained that the articles shipped are not those described in this bill of lading, the freight charges must be paid upon the articles actually shipped.

Sec. 9. Except in case of diversion from rail to water route, which is provided for in section 3 hereof, if all or any part of said property is carried by water over any part of said route, such water carriage shall be performed subject to the liabilities, limitations, and exemptions provided by statute and to the conditions contained in this bill of lading not inconsistent with such statutes or this section, and subject also to the condition that no carrier or party in possession shall be liable for any loss or damage resulting from the perils of the lakes, sea, or other waters; or from explosion, bursting of boilers, breakage of shafts, or any latent defect in hull, machinery, or appurtenances; or from collision, stranding, or other accidents of navigation, or from prolongation of the voyage. And any vessel carrying any or all of the property herein described shall have the liberty to call at intermediate ports, to tow and be towed, and assist vessels in distress, and to deviate for the purpose of saving life or property.

The term "water carriage" in this section shall not be construed as including lighterage across rivers or in lake or other harbors, and the liability for such lighterage shall be governed by the other sections of this instrument.

If the property is being carried under a tariff which provides that any carrier or carriers party thereto shall be liable for loss from perils of the sea, then as to such carrier or carriers the provisions of this section shall be modified in accordance with the provisions of the tariff, which shall be treated as incorporated into the conditions of this bill of lading.

Sec. 10. Any alteration, addition or erasure in this bill of lading which shall be made without an indorsement thereof hereon, signed by the agent of the carrier issuing this bill of lading, shall be without effect, and this bill of lading shall be enforceable according to its original tenor.

Figure 48 (b). Straight Bill of Lading (reverse)—Continued

same care as the marking of the packages—in fact, it is important that the markings be compared with the bill of lading. Another thing to remember is to date them the same date that the goods are delivered to the railroad company. It is considered good practice to put the full routing on the bill of lading. The freight should be described fully, accurately, and by terms shown in the tariff classifications and actual gross weight should always be given.

Tracing Freight

In order to trace freight successfully it is important to know railroad geography and to keep in close touch with conditions on the railroads. There may be washouts and labor troubles, or through some accident the freight may be congested at one point. It is important to know the package car service, the schedules maintained under normal conditions, and where the package cars break bulk.

No tracer should be started until goods have had ample time to reach their destination. When sending out the tracer all available data should be given the railroad and the data should be accurate. In a large city where two or more railroads enter, the shipper should find out if the customer has called at the proper railroad depot.

Often it is not sufficient simply to request the railroad to trace, as this generally means the loss of several days, especially if the railroad clerks are already overburdened with similar requests. It is better for the shipper to do his own tracing. Thus, for a shipment of less than a car-load, it is necessary first to get the billing reference and the car into which the goods were loaded. This information may be obtained from the bill clerk at the station where the freight was delivered. The next step is to obtain from the yard department their forwarding reference of the car in question, i.e., the train to which the car was attached. The procedure at

this point is to wire or write to the agent at the next junction, giving all necessary information. The agent, with complete data at hand, can tell at once whether the shipment in question has been handled at his station. If requested to, the station agent will wire or write the information that he may possess.

In this way the traffic department will at all times be thoroughly acquainted with the progress and handling of the shipment and the shipper can give definite information to the customer. This kind of tracing serves as a check on the railroad service, revealing whether or not the railroad is keeping up its package car schedules as published.

Auditing Transportation Expense Bills

It is the duty of the traffic department to check the freight bills presented by the railroads and other transportation companies. Sometimes the various items have to be checked after the bill has been paid, because the carrier requires payment before goods are delivered. However, a concern large enough to have a traffic department usually enjoys sufficiently good credit to be permitted to settle by check once a week. In this case there is some opportunity of verifying the bill before it is paid.

In checking traffic bills, the items to be considered are weight—whether it agrees with the shipping ticket, or the bill of lading, as the case may be—the rate applied, and the extension of the figures. In the case of express charges the procedure generally is to have the receiving clerk, or the stores department, keep some kind of record or file against which the monthly statements from the express companies may be checked. In the case of outgoing prepaid shipments, some provision is made to provide a ready reference to records, as to the date of dispatch and the charges applying. Other charges to be checked often are demurrage charges and lighterage charges which are presented on separate bills.

Sometimes the traffic department is responsible for seeing that freight on goods bought f. o. b. factory is deducted from the invoice or charged back.

Stoppage in Transitu

Sometimes the traffic department is called upon to exercise what is called "stoppage in transitu." This is done at the request of the credit department, when goods are sold on credit and it is discovered that the buyer is a poor risk. The traffic department in this case orders the railroad company not to make delivery, provided the goods are on the way or still held at the consignee's station.

Handling of Claims

When handling claims they should be supported with clear evidence as to the responsibility of the transportation company, and, generally speaking, they should be filed within six months of shipment.

Claims are of two kinds: (1) loss and damage claims, and (2) overcharge claims. Some firms use a printed form of full letter size, suitable for both classes of claims. The forms are printed in two colors and put up in pads. A white sheet—the original—is attached to the claim, and the yellow sheet is placed in the files with the carbon copy of the letter transmitting the claim. Often the pads are in triplicate so that the accounting department may have one copy for reference. All correspondence and documents in connection with a claim should be filed in a separate folder printed in such a manner as to indicate the claim to which it refers, that is, allowing space for claim number and other particulars. These folders are kept for years for possible reference.

The Freight Claim Association has recommended that separate forms be used for the two classes of claims and for this purpose it has designed two standard forms.

The documents to be used for total loss claims follow:

1. Itemized bill against the carrier.
2. Original bill of lading or, if not obtainable, a certified duplicate, accompanied by a statement as to why the original bill cannot be surrendered.
3. The original paid freight bill.
4. Certified copy of the invoice.
5. An affidavit of non-delivery of the shipment.
6. If the lost shipment has been traced it is well to attach tracing papers to the claim.

When claim is entered for damage to the goods and the cartman receipts for them, as with "boxes broken" or "contents rattling about with every evidence of being damaged," the claims are more readily paid, especially if receipted for by the railroad agent at the point of origin as being received in good condition. Generally, all that is required in this case is the first four documents given in the preceding list. The carrier may require, however, affidavits as to packing and handling by the cartman, as in the case of concealed damage claims below.

Perhaps the hardest claims to collect are those entered for concealed damage, that is, shipments received in apparently good condition but the contents on unpacking found to be in a damaged condition. In this case a number of affidavits will be required in addition to the first four documents given in the list above, namely:

1. Affidavit of the shipper showing that the shipment was properly packed and delivered to a stated cartman for delivery to the receiving railroad agent.
2. Affidavit of shipper cartman showing that the shipment so delivered to him was delivered by him at a stated time to the railroad station in the same order and condition as when received by him.

3. Written statement of the consignee as to the facts relating to the discovery of the damage claimed and the notification made to the delivering agent.
4. Affidavit of the consignee showing that when the shipment in question was received by him the goods were promptly unpacked and that articles in question were damaged; also a statement regarding outward condition of the shipment.
5. Affidavit of consignee's cartman showing that the shipment in question was received by him at the delivery station at a stated time, and was delivered by him at a stated time and place in the same condition as when received by him without damage. This may be supplemented with a statement as to his observation regarding the outward conditions of the shipment in question.

For concealed loss the procedure is substantially the same as above with a change in phraseology.

In addition to the documents above referred to, the carriers have prepared a claimant's damage statement containing questions regarding the handling of the shipment. This form should be filled in partly by the shipper and partly by the consignee.

In the case of claims for overcharges the following papers are submitted:

1. Original freight bill.
2. Duplicate bill of lading.
3. Reference to tariff authority if there is an overcharge in rate.
4. Certified copy of invoice if an overcharge in weight.
5. For prepaid shipments, if prepaid charges are noted on the original bill of lading, this document should be submitted.

To get the best results a follow-up system should be instituted. If claims are handled in a spasmodic manner it will result in laxity on the part of the railroads. Some firms make out a card for each claim and file it under the name of the railroad. At certain intervals, if the claims are not paid, the carriers should be written to urging prompt settlement.

CHAPTER XXII

HANDLING CREDITS, COLLECTIONS, AND COMPLAINTS

Need of Method and System

Just as concerns differ in size, complexity, and policy, so do they differ in their methods of handling the routine work of departments. Yet if there is one department more than another, where the work needs to be standardized and carried out with an inflexible purpose, judiciously tempered with tact, it is the credit and collections department. Lack of proper system in this sphere of office work means loose reins on a skittish horse—ever ready to shy at the least shadow of an excuse for delay, or to pull the lines of credit beyond the bounds of safe control. "Resale arguments," says E. H. Gardner, "lose their power when addressed to a man who is thinking; 'You can't depend on those people; half the time they send out their bills late and then jump on you for being late yourself.' Plenty of customers willingly exaggerate small errors, and what is worse, claim them when they do not exist, but it is hard to preach virtue when you set a bad example."

Though the routine work of the department should be standardized in all its details, and its policy be consistently carried out, yet this policy will of course vary with the character of the business. A house selling a low-priced specialty to 50,000 or more jobbers and retailers will adopt methods very different from a concern dealing in a high-priced article going to a selected list or class of customers with whom credit terms are purely a matter of investment. The office problems of the two concerns will not be the same. The first may have a force of 20 men and a complex system of handling

accounts, the second may use the time of one clerk for only part of a day. Yet whether one man runs the department or 20 men make up the organization, in each case its functions are based on the same principle and are carried out by similar routine methods.

Functions of Credit and Collection Department

The functions of a credit and collection department are two in number, viz., to pass on demands for credit and to follow up the payments. The routine in carrying out these functions may be divided into nine distinct steps or methods of procedure, each of which will be briefly considered.

1. The investigation of the customer's credit reliability. The incoming sales order goes directly to the credit department for its O K. Here the credit man either passes it, holds it for investigation, or refuses it.

2. Second comes the maintenance of credit records. To pass upon the credit of a customer access must be had to reliable sources of information. If the customer is one who has previously dealt with the firm the initial investigation will differ from that made when the customer is new and unknown. In the case of an old customer the investigation leads directly to the ledger records, which may consist of the original ledger in the accounting department or a transcript of the same kept in a separate file. In some cases recourse may be necessary to the credit information files where agency reports, salesmen's reports, letters, etc., are kept. These files are also the source of information regarding a new customer's rating. When the required information is obtained it is filed for future reference in its proper place among the records of the department.

3. The investigation made and passed, the next phase of departmental activities begins, i.e., the follow-up of the customer until the account is paid. The starting point here

is the filing of a copy of the invoice which is usually sent to the department for this purpose.

4. As payments are due, statements are made out. This requires the regular attention of a collection clerk who refers to the ledger or the file containing ledger information.

5. If payments are not made in accordance with the terms of the sale, further steps, progressive in nature, must be taken until the account becomes normal. This requires an examination of the ledgers, or the use of a tickler file, by which the collection steps to be taken are followed up at regular intervals.

6. The sales department must be kept informed regarding those customers who approach the dead line of credit so that the necessary changes of terms in selling can be made. This requires that regular reports be sent to the sales department on doubtful accounts whereby the sales manager in turn can warn his men.

7. Provision must be made for keeping the credit department informed when an account is settled so that no further effort at collection need be made. This requires the prompt recording of payments in the ledger or other form of ledger information.

8. Provision must also be made to keep the department informed of those customers whose claims are under consideration, so that the credit man will not be pressing for payment while adjustments are under way. This requires close co-operation between, and a common source of information for, both the collection and claims departments.

9. Special provision must be made to take care of those cases which fail to yield to the ordinary collection procedure. If an attorney is to handle the account this step is not usually taken until a responsible executive is consulted and all the facts which should be considered in the case are laid before him.

Influence of Modern Methods on Credit Organization

The contact of the credit department with the customers of a concern is usually carried on at long range. In retail businesses, however, provision must sometimes be made for the credit man or the executive to have personal interviews with customers; also in lines of businesses where credit information is frequently sought by credit reporters and others, a special office should be provided for the use of the credit manager so as to obviate any chance of interruption. It is interesting to note that the growing importance of the credit department's outside relationships is changing the character of the organization in personnel, methods, and records. While in many concerns it is still thought advisable for the book-keepers to be under the direction of the credit manager, the latter is expected to be something more than a good book-keeper of the old time days when "selling our goods on trust" and "getting in the money" were responsibilities delegated to the "counting house." The successful credit man of to-day makes a thorough study of business conditions; he carefully appraises the risks in a given case through the collection and analysis of credit information; he maintains a prompt collection service and uses strategy in collecting stubborn accounts.

This change in the method of handling credit and collection work is clearly marked by the assignment of all routine duties to clerks, leaving matters requiring executive judgment in the hands of the credit manager. Thus the earlier steps of the follow-up are usually attended to by subordinates and, as the operations are of a routine nature, they can be carried out on a rigid schedule, making it possible for groups of accounts to be dealt with on the precise date when the term of credit expires.

This separation of routine from the function of management makes it possible to treat the routine factors by them-

selves. A consideration of the problems arising in the collection of credit information, the various criterions by which judgment is given in extending credits, and the development of collection strategy, goes beyond the function of office management. For this reason these branches of the subject are not discussed in this book.

Organization of Department

The organization of the credit department may be considered under the three heads of: (1) arrangement and equipment, (2) system, and (3) personnel.

1. The department should be housed in close proximity to the main files so as to afford easy and quick reference to this source of information. It should also be in convenient proximity to the accounting department. If frequent reference to the ledgers interferes with the bookkeeping work the remedy is for the department to keep a transcript of records. The filing equipment of the department should include a credit information file and files for invoices and correspondence. These will be considered later.

2. The routine of the collection department should be so systematized as to take care of, not only the majority of accounts which are paid when due, but also as many of the delinquent accounts as possible. The use of forms, records, and tickler files in this connection will be explained in other sections.

3. The organization of the personnel requires care in the selection of clerks who must be, above all, systematic and accurate. Initiative and originality are not expected of them. When a departure from the customary procedure is advisable, the matter should be brought to the attention of the credit manager and left to his judgment. Chapter XXX which deals with the selection of the right employee covers the subject.

The Ledger and the Ledger Sheet

The court of final appeal in the collection department is the ledger record of the customer's account. For this reason many credit men still cling to the ledger to the exclusion of almost all other information, and insist that, if this record is accurate and up-to-date, it provides all the information required to conduct a rational collection follow-up. They insist that even "exact copies" are unsatisfactory, for mistakes grow in proportion with the number of copies made. (Such an attitude, of course, excludes a transcript of the ledger from their system.) Instead of a customer's credit file, tissue carbons of important information and correspondence are attached to the ledger sheet, thus keeping the original and supplementary records in one place and avoiding the mistakes due to transcribing and the confusion of decentralization. However, all this is a matter of policy and methods. Whether the avoidance of mistakes is counterbalanced by loss of time on the part of several employees trying to consult the same record book at the same time, and traveling from one department to another, only the manager of the local situation can tell.

"Whether or not," as one authority says, "the ledger is used as the sole record of account, it is the chief record." Like the production order in the factory and the sales order in the store, the ledger record is the basic factor in a collection system.

The Form of the Ledger Sheet

The form of this record varies, but the fundamental information and arrangement contained on any ledger sheet usually conforms to the following description: The top of the sheet contains the data pertaining to the customer's credit standing, the credit limit assigned him, and his agency ratings. Here also should appear his "present balance," always kept

up to date so as to avoid the delay due to deducting credits from debits to find out the customer's indebtedness and its relation to his assigned credit limit.

Another aid in gathering information quickly is the "star-ring" of the record, so as to distinguish at a glance, good payers from slow payers and slow payers from bad. One public utility company pastes a black star at the head of an account when experience shows that this account needs to be followed up if it is to be settled when due.

Ledger Sheet Used as Correspondence Tickler

Another purpose which the ruling of the ledger sheet can be made to serve is that of a correspondence tickler. In this case the top of the sheet shows the days of the month and signal clips are used to mark the date when the account is to be followed up. Below the date line a parallel row of spaces provides means for indicating the action taken. A simple system of symbols such as "S" for statement, "R" for reminder, "D" for department, and "L" for legal procedure, etc., provides an easy means for recording the procedure under the dates at the top of the sheet.

Collection Cards and Follow-up File

For greater convenience the collection record may be transcribed on a card, as illustrated in Figure 49, showing the data indicated above.

When an entry is made on a card the due date of the account is indicated by clipping a metal tab over the number of the day of the month. Different colored tabs may be used to indicate the months—for example, a red tab for accounts demanding attention in the current month, a yellow tab for those the next month, and so on. Each day all cards filed under that date are taken out by the collection clerk in charge of the file who checks the entries on the card against the ledger

any system of filing can be used—geographical, alphabetical or otherwise.

Whether the collection record is kept in the books of account or in a separate card file, the adoption of one method or the other at the beginning of a business is necessary.

Information and Correspondence Folder File

Credit information is commonly kept in a separate file. Usually a folder is employed large enough to contain all correspondence, reports, and other papers referring to the customer's credit. By pasting the reports on the inside of the folder cover these important papers are insured against loss and yet are always ready for immediate reference.

The advantage of the folder system lies in its double function: (1) of keeping all the information together and in shape for filing, and (2) of furnishing a convenient place for summarizing the history of the customer's credit relations with the house. On the lower left side of the cover face and occupying about one-fourth of the space, is a ledger transcript of the account with columns for the date, amount, discounts, dates of payment, and claims. At the right side in a similar amount of space runs a history of the account, showing agency rating, credit limit, by whom the account was opened, and by whom the credit limits were O K'd. The upper part of the cover contains general information. At the left are spaces for the usual items of name, address, and change of address, whether partnership or corporation, who pays the bills, a list of agency reports on file, references, bank, and space to show whether a signed statement was presented by the customer or not, and "remarks." The remaining half of the upper space is devoted to collection data relating to any legal procedure, showing claims, costs, judgment, and other terms of settlement.

In practice the folder proves inconvenient and unwieldy

as a record to which frequent reference needs to be made, and the collection card referred to above is generally used by those who frequently need to make brief reference to the account.

The folder proves an especially valuable record to consult when the accounts become troublesome, as all the data relating to the customer and the status of his account is found here. The chief purpose, however, of the complete record is to enable the credit manager to familiarize himself with the conditions of the accounts—a thing which he should do at least once a month.

Method of Handling Invoices

In many businesses, and especially among manufacturing concerns, each invoice is regarded as a separate account and as falling due at the end of a specified term—thirty, sixty, or ninety days. In such a business a copy of the invoice can be made to serve the purpose of a tickler follow-up instead of the collection card previously described.

All invoices are made in duplicate, the original going to the customer. From the duplicate the necessary entries are made on the books, any special terms being noted on the back of the copy. When the duplicate copy has served its purpose in the accounting department, it is sent to the collection department, where it is filed under the date when the amount falls due.

In this way the invoice becomes a part of the follow-up system, serving as a tickler which automatically reminds the correspondence clerk when the time for action approaches. It should be noted that invoices printed on thin stock are poorly adapted for use in a tickler file. To overcome this drawback the duplicate should be made on stout paper and this serves the purpose of a follow-up reminder admirably when put in a special maturity tickler or file.

Special Follow-up Devices

Considerable ingenuity is often shown in devising special methods whereby collections may be facilitated in some particular business. One credit man, for instance, uses a correspondence folder with an opening cut in its face through which the ledger record, and the key number of the last letter written, are visible. If the detailed correspondence is needed it can be referred to by removing it from the folder. Another manager makes use of a "master sheet" on which are listed the orders for each day. Instead of filing the invoices in a tickler file, their numbers and details are entered on the sheet which is then filed and treated as an individual invoice. Thus, all invoices requiring attention on the same date are recorded on the same sheet. This method is especially valuable when invoices for small amounts are numerous and when the credit terms in each case are the same.

Still another firm uses a "monthly statement," a record devised to present a synopsis of the entire amount. The synopsis is brought up to date at the end of each month when the regular statements are made out. The monthly statement replaces the collection folder, but the collection card is handled in the tickler file in the way already described.

Relations with the Claim Department

The relation between the collection and adjustment departments varies in complexity depending largely upon the size of the claims and the nature of the adjustment. Very small claims may be allowed by the bookkeeper with, in consequence, little or no interruption in the collection procedure. Claims involving sums of considerable size are referred to the claims department of a large business. When the adjustment is long drawn out, it may be deemed good policy to charge off the amount from the books and against the ledger of the claim department. Here it remains until an adjust-

ment is made, or until the concern is satisfied that the claim cannot be allowed, when the charge is re-entered on the customer's account and the collection department takes up the matter again.

The opportunities for misunderstanding between the collection and claims departments occur so frequently that special caution should be observed in keeping each informed of the activities of the other. The two departments are likely to work at cross purposes, if the collection department keeps on with its follow-up, while the claim department is striving for an "entente cordiale" with an irate customer. A regular flow of interdepartmental memoranda should keep each department informed of what the other is doing and enable them to pull together.

Procedure in Adjusting a Claim

In businesses of considerable size, the handling of adjustments is simplified by dividing the complaints into definite classes which may be based on differences in the goods handled, or on the type of complaint received. The adjustment clerk, or correspondent who receives the complaint, pins a requisition slip to the letter and sends it to the department most likely to keep the records bearing upon this particular complaint. The routine then to be followed may be described by a typical example.

In a publishing house doing a large mail-order business, when complaints regarding payments come in, the adjustment clerk places a check mark against the words "List Department" on the slip for directing interdepartmental mail, pins it to the letter, and puts it into the outgoing tray. The list department, as its name implies, keeps a card record, filed alphabetically, showing the customer's name, address, and the particulars of the various orders sent in from time to time. The chief clerk of the list department, upon receipt of the

letter to which the clip is attached, when noting its contents, gathers such information bearing on the case as his record cards contain (such as the account number, the books ordered, etc.) and then notes the details upon the requisition slip which he sends back to the adjustment clerk. The adjustment clerk, who now has the account number, sends for the customer's account card and with this information answers the complaint about payment. In the meantime the collection department is informed of the situation, whereupon it notes the fact on the follow-up card or sheet by some special mark or colored sticker. This stops all action of this department for the time being.

If meanwhile no notice comes in from the claim department, the collection clerk advances the card according to schedule; but should a second follow-up date be passed without word from the adjuster, a memo is sent to him asking for advice on the matter.

Scheduling Collection Work

In all collection work it is important to prevent the crossing of the customer's remittance with the periodical statement in the mail. This is largely due to the lack of a proper mailing schedule. With the home office as a center, the whole country should be divided into zones. Thus, with New York as a center a six-day schedule may be worked out to include the New England states, the Middle Eastern states, and as far south as Maryland; an eight-day schedule for the Southern states, as far west as Oklahoma; a ten-day schedule for the Northwestern states to Montana; and so on for the whole country. In the operation of such a schedule other factors besides distance need to be considered; for example, the size of the amount to be collected, and whether or not the customer is expected to reply immediately on receipt of a reminder. Continued experience in collection matters gen-

erally suggests many modifications of a schedule based merely on distance.

Small sums, for example, may be paid at once, while the remittance of larger amounts generally takes a longer period.

Importance of Regularity in Follow-up

As regards the intervals between follow-ups, the common practice is to allow from 10 to 20 days. The period should allow for the various factors of distance, mental inertia, and forgetfulness without losing sight of the psychological effect of regularity in reminding the customer of his indebtedness. D. A. Beebe, Collection Manager of the Alexander Hamilton Institute, after weighing the various factors, has worked out a follow-up system illustrated in part as follows: For payments due on the first of the month, and based on eight-day intervals for follow-ups, this mailing schedule is used:

Form	Date Sent
1st statement	22nd
2nd request	3rd
1st letter	11th
2nd letter	19th
3rd letter	27th
Draft	6th

It will be noted that the second request is sent out two days after the payment is due, and that a subscriber is allowed two days longer than the mailing schedule calls for, before drawing a draft on him.

In his recent work on collection methods, already referred to, Professor Gardner emphasizes the psychology of the follow-up work as follows: "It is easier to figure from the 2nd to the 12th of the month, or from one Tuesday to the next, than to make a mental estimate of any other interval less than a month. Let it not be thought that this point is unin-

portant; if the debtor can form a definite visual image of the day on which payment is required, this will act as a powerful stimulus. It is better to say, 'Failing to hear from you by May 15, we will draw,' than to say, 'Failing to hear from you in ten days we will draw.' "

Scheduling is especially needed in the credit and collection department since delays here are costly. Business custom has established the practice of looking to the creditor to take the initiative in the collecting of debts; therefore, if the department entrusted with this duty is dilatory and irregular in its methods, opportunity is not only lost for collecting money legitimately belonging to the firm, but the ties which are always slightly strained by indebtedness, are still further weakened by the methods of an unsystematic credit and collection department.

Division of Routine Work

The routine operation that bulks largest in credit and collection work is that connected with the examination of the ledgers, and the passing on customers' orders. Job analysis will disclose the number of accounts that a bookkeeper can examine within the periods set by the mailing schedule described above, by dividing the ledgers according to territory and then subdividing each ledger into the desired number of sections for which he is responsible. As the majority of customers' accounts can be collected without delay, standards of operation can be established to cover the routine work while matters needing the personal attention of the collection manager are given the special care that each particular case may require.

Credit Department Reports

Nothing will bear better testimony as to the efficiency of the credit and collection department than a systematic and

prompt preparation of comparative reports. Among these should be monthly reports showing:

1. The percentage of losses to sales.
2. The volume of business lost through adverse credit decisions.
3. The volume of orders rejected.
4. Cost of collections.
5. The progress made in collecting certain classes of accounts.
6. The comparative cost of dealing with each class.

The reports which bear upon the department's activities and their relation to the reserves for bad debts, the office budget, if one is made out, and other accounting features, should naturally be made out at the proper time. The reports pertaining to clerical work and the control of the organization are not different from the methods suggested in the discussion of these features in other chapters of this book.

CHAPTER XXIII

THE SPHERE OF SALES MANAGEMENT

Evolution of the Modern Sales Department

The selling of goods is usually one of the first business activities to demand a separate departmental organization whereby the work is cared for by its own office force and controlled by its own executive.

With the development of means of transportation and communication, the manufacturer or jobber sought wider markets for his wares. Naturally his method of presenting their merits was through the spoken appeal of his representative to which later was added the appeal of the printed word. Today the modern counterpart of the old-time sales department bears little or no resemblance to the picturesque combination of sales manager and drummer of twenty-five or more years ago. Then the organization was based on personality—the personality of men who were “born salesmen” and “good mixers,” grouped around the shining light of the sales manager who pre-eminently was required to be the best mixer of them all.

The supply of personality, however, fell short of the demand. The need for competent men to sell goods far outstripped the birth rate of natural salesmen. Necessity drove modern business to study the art of making salesmen and to search for other ways of making sales than by “entertainment.”

As the making of a sale is a peculiarly complex psychological process, the more the matter was studied, the more complex became the work of the sales department; so much so that one big branch of its activity was lopped off, planted

in a field of its own, and left to grow into the modern advertising department; while another offshoot only recently transplanted, has waxed into the sales promotion department the function of which is to serve as a link between, and a valuable aid to, both the sales and the advertising departments.

Relation of Sales to Advertising and Promotion Work

From the foregoing explanation of the evolution of modern methods of marketing, it follows that the activities of the three departments referred to can only be clearly defined and separately organized under certain conditions. These conditions are that the product must be of such a nature that it pays to sell it by both the written and spoken word and to promote both kinds of selling methods on a scale big enough to require the attention of separate executives with their own departments. A few businesses, such as mail-order houses, approach their customers only by means of the written word; others, such as life assurance companies or jobbers, rely largely on the spoken word; others again, such as manufacturers, may carry on both kinds of activity in one department or, if the volume of sales permits, the work of selling may be divided into three distinct departments. Thus the relation of the sales to the advertising and promotion departments is largely determined by the nature of the product, due consideration of course being given to financial stability and productive capacity.

Methods of Marketing

If the product is a specialty which ordinarily the consumer does not buy until its advantages are pointed out to him, and if it sells at a price and a profit to cover the expense of direct solicitation, it may be sold direct to the consumer. Cash registers, special machinery and encyclopedias are examples.

The marketing of such products requires a force of salesmen proportionate to the size of the field and the productive capacity of the concern. The work of the sales department then takes "pride of place," that of the advertising and sales promotion departments (if the latter exists) being of quite secondary importance and chiefly directed to supporting the efforts of the men in the field.

If the product is a comparatively high-priced specialty in general demand, such as piano players, automobiles, furniture, etc., which in consequence is handled by one or more dealers in every town, advertising may take pride of place in the scheme of marketing, the work of the sales department being merely to "cash in" on the demand created by the publicity.

If the product is a necessity the demand for which is confined to a special class, such as manufacturing supplies, or general office supplies, the most economical way to market it may be by means of a sales force supported by advertising in trade or class media.

If the product is a necessity in general demand, its sale on a national scale may be created by "going the limit" and using the full battery of completely equipped advertising and sales departments.

The preceding information may seem elementary but it is necessary to draw attention to it for the purpose of again emphasizing the close relationship of the three sister departments. In a small business the work of all three may be carried out in one department. In a business of moderate size the sales promotion work may be conveniently divided between the sales and advertising departments. In a large business the work of the sales department centers wholly around that of the men in the field and it is from this angle that the subject is discussed in this and the chapter which follows.

Functions of Sales Department

As the sales department is organized solely for the purpose of selling goods through salesmen, it follows that its chief duties are:

1. To control and direct the activities of the men in the field.
2. To compile office records showing the results of their efforts.
3. To reward special effort and also to train new salesmen.

The first two phases of the work will be taken up in this chapter, the third being left for later consideration.

Where no sales promotion department is maintained, another important function of the sales department is to search for the potential customer—termed “prospect” in the jargon of salesmanship—and keep after him by personal solicitation, letter, or circular, until he is transformed into a buyer. As in the majority of businesses this work is carried out by the sales department, and is only relegated to the promotion department when pressure of work drives, the handling of the prospect and the prospect file will also be discussed in this chapter.

The amount of detail to be attended to will naturally vary with the volume and complexity of the business. No useful purpose would be served by stating that such and such a clerk or assistant manager performs this, that, or the other duty, because duties vary with conditions. Those phases of sales work which are more or less common to every business that aims to sell its product in an efficient and intensive way will here be taken up so far as they relate to the control of the men in the field. These may be briefly summarized as follows:

1. Accurate and detailed record of the whereabouts and progress of each salesman day by day.
2. A well-rounded system of reports from salesmen and for salesmen, embracing information about individual prospects, customers, etc., and covering data pertaining to towns, groups of towns classified by population, merchandise factors, such as the number and variety of assortments carried, etc.
3. A unit order system, with enough units to give the sales office accurate records of orders by various classifications.
4. Analytical forms for departments, divisions, and territories, showing monthly and yearly sales results of individuals.

Method of Analyzing Field

The first step toward ascertaining sales possibilities in the case of an established business is the study of what already exists. A simple start is to list the towns and cities of 5,000 population and over, and place against each name the sales of the preceding year. This is common practice.

The next step is to indicate by a symbol the "rating" of the town. Manifestly the possible sales of a \$5,000 automobile in a city of 30,000 in which only twenty men earn \$3,000 a year or over—as in certain mill towns—are not directly comparable with the possible sales in a town of 30,000 of purely residential character where 3,000 men may earn average salaries in excess of \$3,000. Substitute overalls for \$5,000 automobiles and the market possibilities are at once reversed. The common failure which meets attempts to state in dollars and cents the possible buying capacity of different classes of territories is usually traceable to a neglect of this very factor of the "nature of the town."

Having listed and marked the towns, the next step is to

classify them according to their ratings and enter the population against each. A quota of sales (to be explained in the following chapter) to population should be based, partly on existing sales records, and partly on the rating of the town. No definite figures can be given in this connection. They will vary according to the nature of the product and the strength of competition and at best they will be purely tentative. But the point of determining the sales possibilities in a given field is that in this way the sales manager creates standards to work by.

To divide the field equitably between the salesmen and to check up their work over long periods of time such quotas are essential. It is not enough that there be a demand for the product or that it be "the best of its kind." It is an established fact that a satisfactory article, with good distribution and systematic effort back of it, is often a more satisfactory selling proposition than a superior article sold without a sound knowledge of the best methods of marketing and without adequate financial resources. Again, what counts in selling is business that can be secured at a reasonable expense and, in the case of a repeat article, business that can be held when secured. Unless a sales manager knows what business ought to be obtained in a given territory, and compares this with the actual business secured and the expense of getting it, he is working more or less in the dark.

Sales Districts and Routing

After the field has been analyzed, the matter of laying out the sales districts comes up for consideration. The important consideration here is the covering of the territory with the least possible mileage, which generally means at the smallest expense and in the shortest time consistent with business possibilities. If the problem is simply to cover the territory at given intervals and the salesman is more of an order-taker

than business developer, one big route can generally be made out of his district.

The problem of routing, however, is rarely as easy as this. Even a slight modification may cause complications. Often the salesman has to cross and recross his district to take care of inquiries or special matters that come up from time to time. In this case the district is divided into a number of smaller routes based upon railroad stretches. In this way the units are made smaller, enabling the salesman to complete one route before he is called away and upon his return to begin with the one nearest to him and work forward. This gives flexibility and enables the management to check up just how much of the district has been worked by looking up the number of routes covered. Besides, it saves money in the railroad fare, because the duplication is for relatively small distances rather than large ones.

Control of Salesmen in the Field

While the routing of salesmen from the home office has always been thought of as good practice, it has not generally been considered a matter demanding constant supervision. However, with the growing appreciation on the part of sales managers of the true significance of "territory," a new attitude is being assumed regarding the necessity for constant control and supervision of it. "Territory" is to a salesman what a machine is to a factory operator. It has a certain "capacity" and should be worked to its limit. But the only way this can be done is to watch it carefully and record its productivity. This means records and a system of reports by which the salesman and his territory are continually being registered in the office. Route lists are made out by which salesmen are required to show a daily record of their customers and prospective customers visited, whether a sale was made, etc.

The salesman's visit to a customer is prearranged by send-

ing instructions to him before the call is made and also by sending advertising literature or other matter to the customer to prepare the ground for the salesman's coming. As a number of departments may desire to get in touch with the salesman while en route, a memorandum is prepared daily for the whole office showing each town to be visited within a given period so that mail from the home office covering such matters as "hang-fire accounts," adjustment calls, advertising leads, new prospect inquiries, etc., can reach him promptly.

All this has increased greatly the administrative costs at the "home office," making it necessary for the sales manager to study "system" as well as "selling points." Good records and a system of handling them with a minimum of labor is now a part of every manager's equipment.

The Use of the Map and Tack System

An excellent device for visualizing the routes covered by the salesmen and the work ahead of them is a set of date maps mounted on wood and stored in a cabinet.

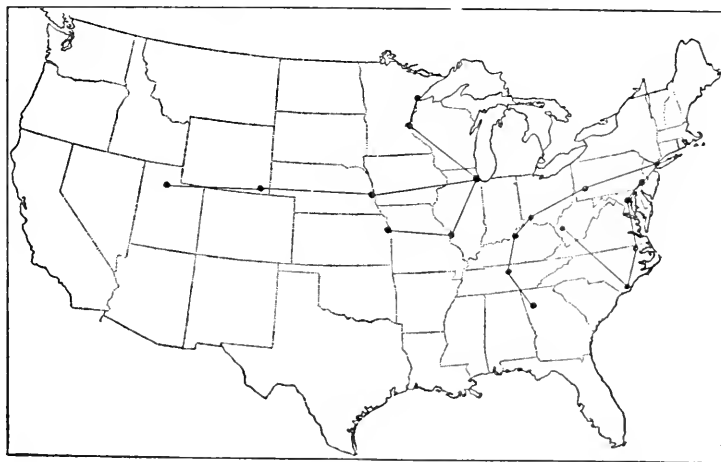


Figure 50. Sales Map

The dots indicate tacks placed at points which the salesmen visit; the lines, the string used to show the salesmen's routes.

The headquarters of the salesman may be indicated by a tack of a given color; prospects in his territory by tacks of another color; special matters to be attended to by tacks of a third color; and the route to be taken by him may be indicated by using a colored string to connect the tacks in the order in which the places are to be visited. (See Figure 50.)

The daily progress of the salesman may be recorded by means of a string of another color to be wound around the various tacks as he moves from one place to another. The last tack covered by the string would indicate his present location and the next tack along the other string would locate his next stopping place. A further use of such a map is to indicate, by means of different colored tacks, the towns in which sales are above and below the quota.

As a help in arriving at more definite conclusions a list of the names of all well-rated dealers in each town may be drawn up, with the exact amount of sales to each customer. This will show whether one salesman is skipping the smaller towns and working only the bigger ones, or whether another salesman has a special liking for the smaller towns to the neglect of the larger. The lists and the maps together will provide a good bird's-eye view of what each salesman is doing in any part of his territory. His sales sheet summarizes his activities as a whole.

Analysis of Sales

In practically every business, sales are controlled by means of the following statistical records:

1. Sales made to each customer, classified according to commodity, the unit used in recording being either one of value or quantity, whichever meets the needs of the business best.
2. Recapitulation of sales for a given period, showing

the amount sold each customer, this being classified according to commodity.

3. Recapitulation of sales for a given period, showing the total sales in territories made by each salesman, these sales being classified by commodity.
4. Recapitulation of sales showing total of each commodity sold in corresponding periods.
5. Record of lost orders and the reasons for loss.

The compilation of the above statistical information is based on the orders, salesmen's reports, and correspondence received. If the record of sales is compiled on the basis of the amount of sales in dollars and cents, it is possible to obtain these figures from the sales ledgers periodically. In a great many instances, however, charges do not reach the ledger until some time after the order is received, particularly when the merchandise is sold under contract with partial deliveries stipulated, or made to order; consequently records built from the ledger would seldom, if ever, be up to date.

Sales Orders

Sales orders are received in one of three ways:

1. By mail on the official order blank or letter-head of the customer.
2. From a traveling salesman on a sales order blank furnished for that purpose.
3. Through a visit of the customer to the sales rooms of the organization, in which event the same form of sales order blank would be used as is supplied to the salesman.

Modern practice has reduced the clerical work of making all the copies of the order needed to one mechanical operation. Thus a modern unit system would provide an original file copy and four carbon copies at one time—facsimile rec-

ords for the correspondence, sales, and accounting departments, and a subject copy for the files. With such modifications as may be necessary to suit special conditions this office record copy should show the following information:

1. Order number.
2. Customer's number
3. Subject or article (kind)
4. Order, how received
5. Date
6. Bill to (name and address)
7. From whom (signed)
8. Department
9. Amount charged
10. Terms
11. How to deliver
12. When delivered
13. Date billed
14. Billed by
15. O K'd by
16. Commission
17. Salesman
18. Description (of article and terms), etc.
19. Remarks
20. Approved by (signed)
21. Order copied by whom

After the order has been copied on the official order blanks, which are numbered consecutively, the original is marked with the order number for the purpose of identification and then filed—either with the correspondence or, if the orders run into volume, in a separate folder immediately behind the folder containing the correspondence. A record of each sale

Keep Memoranda of Anything Out of the Usual or Irregular Affecting This Showing
On Reverse of This Sheet

MONTHLY AND YEARLY SALES SHOWING

Orders Shipped

.....Salesman.....Months Worked.....Ending.....19..

SALES—CLASSES OF CUSTOMERS

DIVISION	FOR MONTH		FOR YEAR		% GROSS MARGIN	AVERAGE MONTHLY SALES
	PRICE	COST	PRICE	COST		
Commercial.....						
Bank.....						
County.....						
Total Gross Shipments This Year.....						
Total Gross Shipments Last Year.....						

SALES—CLASSES OF GOODS

p.

KIND	FOR MONTH		FOR YEAR		% GROSS MARGIN	AVERAGE MONTHLY SALES
	PRICE	COST	PRICE	COST		
Wood Furniture.....						
Filing Cabinets.....						
G. W. Bookcases.....						
Stock Stationery.....						
Manufacturing.....						
Metal Furniture.....						
Vault Doors.....						
Fireproof Safes.....						
Bank Safes.....						
Bank Fixtures.....						
Transportation.....						
Total All Shipments.....						
Price Merchandise Returned.....						
Net Total Shipments.....						
Total Cost.....						
Cost Merchandise Returned.....						
Net Total First Cost on Net Shipment.....						
Gross Margin.....						
Freights Authorized.....						
Charges to P. and L. etc.....						
Net Gross Margin on Net Shipment.....						
Estimated Orders Not Yet Shipped.....						
Less % Probable Returns.....						
Costs.....						
Margin on Orders Not Yet Shipped.....						
Orders Dated in Last Year, Shipped This Year.....						
Less % Probable Returns.....						
Costs.....						
Margin on Orders Dated Last Y., Shipped This Y.						
Less % of Margin Probable Returns.....						
Net Total Sales This Year.....						
Net Total Gross Margin Sales This Year.....						
Net Total Sales Last Year.....						
Net G. Margin Sales Last Y.						

Figure 51 (a). Monthly and Yearly Record of Results of Salesman's Work with Expenses (face)

A sheet giving details of salesman's work.

ager what each salesman is worth to the business and will guide him in his chief duty of encouragement or discipline.

To this end a sales sheet should be drawn up for each salesman, covering his work for the month and for the year in all necessary details. This record, for obvious reasons, will vary with the nature of the business. To illustrate the detail which such a record should cover, an example is taken from a business dealing in office furniture and supplies. Figure 51 is a yearly and monthly sheet for each salesman on which sales are classified by lines, all deductions shown, and the average monthly sales and those for the year, to date, are worked out. On the back of the sheet a record of expenses is kept showing the ratio of expense to sales.

Statistical Records

By keeping a record of each salesman, as shown on the above sales sheet, the sales manager has the basis for his control. He can make up comparative statements showing the salesmen's records by lines of goods, and he can construct a final summary showing the total of all salesmen's orders. The individual records may be kept in separate loose-leaf binders in which second carbons of all letters written to the men about their work are filed. Here also may be filed a separate sheet showing a record of order numbers, all sales incorrectly figured or made under price, copies of reports wrongly made out, or memoranda of any kind covering methods, personality, or habits which may be taken up with the men at the proper time.

Other statistical records that may be compiled from the sales records are monthly collection reports for the comptroller; records of lost orders due to defects in the product or other causes, for the production department; etc. Numerous compilations are possible and vary with the kind of information demanded by the business policy of the concern.

CHAPTER XXIV

HOME OFFICE CONTROL OF SALES

Reports from the Field

Centralized control of salesmen implies as a prerequisite constant and systematic reports from the men in the field. These reports are generally printed and their variations are as numerous as the classes of business represented.

Among other items most generally looked for are the following :

1. Information as to whether dealer has a good, medium, or bad locality.
2. Just exactly what kind of business he does, whether he does any jobbing or has any country or outlying trade.
3. What kind of windows he keeps, what degree of alertness his clerks display, what kind of advertising system he uses.
4. What kind of policies he has; the type of advertising he does or is going to do; what his average yearly advertising and stock turnover amount to.
5. Exactly what classes and character of trade he caters to.

The Salesman's Customer Report

As the success of a salesman depends very largely upon the persistency with which he "follows up" prospective customers, it stands to reason that a method which will enable him to keep always in mind his future engagements will be of inestimable value to the firm. The form here shown (Fig-

ure 52), used in connection with tabs or movable markers, enables the home office to follow with persistency and accu-

Name of Firm	<i>Lindsay and Carr Company</i>	2
Name of Buyer	<i>Mr. J. W. Brown</i>	
Street	<i>Main St. East</i>	4
Town	<i>Rochester</i>	
State	<i>N. Y.</i>	
Buys From	<i>John R. Place Corporation</i>	6
Stock Carried	<i>General Dept. Store</i>	8
Submitted	<i>Charging and Billing System</i>	10
Interested in	<i>Loose-Leaf Ledgers</i>	
Prospects	<i>Good</i>	12
Complaints	<i>None</i>	
Dates Seen	<i>3/4 4/6 5/10 6/12</i>	14
Dates Written	<i>3/7 5/16</i>	16
Catalogues		
Call Again	<i>7/1</i>	18
Reason Bought	<i>Origin</i>	20
Cost of Business		
Remarks	<i>Will be in the market soon for complete office outfit for</i>	22
	<i>Minneapolis, Minn., branch</i>	24
		26
		28
		30

Figure 52. Salesman's Customer Report

The dates when future calls on customers should be made are indicated by sliding a marker along on the right-hand side of the loose-leaf sheet. When cards instead of sheets are used, the numbers denoting date should run along the top. Thus those requiring attention on any one day are easily found.

racy, all prospective customers and to keep the salesman to his various engagements.

The records are arranged alphabetically and can be re-

ferred to instantly, the markers showing all engagements which should be kept on any particular date. The records may be removed and carried in the pocket, the proper notations being made on them at the time the call is made. If a person is seen on the 10th of the month, and it is desirable to call again on the 20th, it is simply necessary to slide the marker along the record from the number 10 to 20 on the right-hand side. All those requiring attention on the 20th will have markers in a straight line, one under the other, and can readily be removed from the binder without disturbing any of the other records.

Town <u>Northport</u>		Date, <u>October 4, 1918</u>	
ACCOUNTS	COMMENTS	EXPENSES INCURRED	
<i>Harris Bros.</i>	<i>General Store</i>	R.R. Fare from New York	\$3.75
<i>Adams Dept. Store</i>	<i>General Store</i>	Excess baggage.....	
<i>B. Decker</i>	<i>Married to his line</i>	Hotel (Amer.; European).	2.00
<i>The Fair</i>	<i>Sold</i>	Tips.....	.25
<i>L. Stern & Co.</i>	<i>New—may work up</i>	Meals.....	
		Incidentals.....	.75
		Total.....	\$6.75
Felt Dept. Sales.....		Remarks: State industries, general business conditions, and so on. <i>Small, but ambitious.</i> <i>New stores opening.</i> Salesman <u>S. H. McKenna</u>	
Caps Dept. Sales.....	\$46.25		
Total business booked.....			
Total expenses incurred.....	6.75		

Figure 53. Salesman's Report by Towns

This record provides both for a report on each visit and also on the expenses incurred, thus making a complete record of the salesman's accomplishments for the day.

Salesman's Reports by Towns

Another good form for salesmen's reports provides a separate sheet for every town on the route with the names of the houses on which the representative is to call typewritten in. (See Figure 53.) Enough blank lines are left, however, so that he may fill in the names of new prospects that he may be able to work up. In the comments column the results of each call may be noted by a phrase and in the remarks column the impression of the town as a sales field. This sheet, as it shows in addition details regarding the actual amount of expenses, is a complete record of just what the salesman has accomplished during the day. A loose-leaf book should be kept for every salesman and his report sheets filed in the order in which they are received. This will give a complete history of his trips with details of towns and will offer a very good starting point in planning new campaigns and be useful in sending out trade-building letters.

Expense Reports

What items should be included in a salesman's expense report has always been a bone of contention. Some companies, looking upon the salesman as a "business partner," allow him a wide latitude in spending and accounting for money, while others require their sales representatives to adhere to a strict schedule of expenditures and a detailed method of accounting for them. The abuses which grew out of the old blanket item of "entertainment expense" called for some remedy and the closer accounting methods resulted. A method followed by some firms uses the form shown in Figure 54. This form may be printed on a 4 x 6 card, which can be easily carried in the pocket, and when sent to the home office is filed alphabetically by names of salesmen, the most recent report of a salesman appearing immediately back of the guide card.

Salesman.....										
Route From..... To.....										
From..... To..... 19...										
DAY	HOTEL	MILEAGE	CAR FARE AND PULLMAN	EXCESS BAGGAGE	LOCAL CAB AND CAR FARE	LOCAL BAGGAGE AND EXPRESS	TELEPHONES AND TELEGRAMS	POSTAGE AND EXPRESS	INCIDENTAL	TOTAL
Monday										
Tuesday										
Wednesday										
Thursday										
Friday										
Saturday										
Sunday										
Total										
Balance on Hand..... \$.....										
Mileage Remaining.....										
Make Next Remittance of \$.....										
To										
Town.....					Street.....					
					or					
State.....					Hotel.....					

Figure 54. Salesman's Expense Report

When printed on a 4 x 6 card, this expense account card can be easily carried in the salesman's pocket

Indexes of Customers

Almost every concern has some kind of customers index. An effective method is to keep a card index (Figure 55) by states, towns, and cities, with the customers' names arranged within these divisions in alphabetical order. The information deemed necessary on these cards can then be gathered from the salesmen's reports and from correspondence.



Figure 55. Index of Customers

The information for these cards can be gathered from the salesmen's reports.

Prospect Cards and Lists

From the daily reports are compiled also a list of prospective customers, showing date of calls, sales, etc. "Prospect" and "customer" cards are made out in duplicate; one copy to be retained in the office, the other to be sent to the salesman. If the prospect's name comes to the home office from some other source than the salesman, the report is made out upon the prospect card in the home office.

Duplicates of prospect and customer cards are sent to the salesman before he reaches the town where the prospects are located. This enables the salesman to approach his prospect with the latest information and so build up his sales talk from the point where the negotiations were broken off at the last interview.

These prospect files are a very important part of the sales office records and form a valuable item in the firm's assets. The prospect files of some companies contain millions of names. The chief items on such a card where a special and separate form is used, would include the name, the business address, the buyer's name, the salesman's name or other source of inquiry, and also the names of competing firms dealt with. Provision is further made for a record of the follow-up, showing date and amount of material sent in the way of catalogues, advertising, letters sent and received.

When a sale is made the prospect card is put in the customers' report card file. The back of the card may be ruled to correspond with the data called for in the customer's report.

Method of Sales Control Used by a Manufacturer

So important is the feature of control to the sales manager that many firms are today trying out methods whereby not only are the salesman's movements controlled from the home office but his productive capacity as well. The following description of the method adopted by a concern manufacturing foundry machinery after two years of thorough preliminary investigation and classification of data illustrates the procedure.

The management of this company found that production was three times as great as sales. While efficiency had increased in the shop, through the introduction of the Taylor system of management, the factory outlay was worse than useless because of the inability of the sales department to sell the increased production.

Each salesman had been given a special territory and, as is customary practice, was allowed to cover it as he pleased. An investigation of each salesman's territory and reports showed that the salesmen were reaching but a fraction of the prospects in their respective territories, although for years

the management had gone along believing that every foundry in the country had been covered, every possible sale had been made. In fact, by analyzing past sales and systematically covering all the trade papers for new prospects, it was found that the salesmen had actually covered only 50 per cent of the territory because they had overlooked or neglected many possibilities almost next door to former calls. Under these circumstances it occurred to the management that the same principles of control so successfully applied to the factory could with equal facility be applied to the sales department. With this end in view, they began to develop a routing system together with a moderate attempt to set tasks for the salesmen. This latter consisted in giving to each salesman a certain number of calls to make in each town that he visited, on condition that the calls be made within the period allotted for the salesman's stay in that territory.

Route Map Basis for Special Routing System

The basis of the system adopted by this concern was a route map showing the most convenient routes by which each salesman could reach the different towns in his territory. These routes were arranged not only with reference to the geographical situation of the various cities to be visited, but also with regard to the railroad connections both for entering and leaving the town. Thus, although one town might logically from its geographical position be on the same route with a near-by town, the train connections between the two might easily be such as to render it advisable to place the town upon an entirely different route.

In laying out the routes a map with tacks and strings was effectively used. When first put into practice, colored pins were tried but they were so numerous in certain localities as to be difficult to distinguish. A larger map is now used and the various tacks marked to show the number of each route.

The numbers under 200 are given to routes where foundries are widely scattered. Routes bearing numbers over 300 are located only in such territories as New York City, Pittsburgh, and Detroit, in what might be called hub cities, where the work of the salesmen in the outlying districts can be handled most conveniently by making side trips from the large city.

Assigning the Routes to the Salesmen

In dividing up the field and assigning salesmen the total possibilities of the territory in question are considered, as well as the time required to cover it, which depends upon the distance between the various foundries. One man may have a few more calls to make than another because the foundries are close together in his territory. In the actual laying out of the routes the services of an experienced railroad man were secured and the various trips laid out in units of railroad stretches. Instead of making one big traveling route of the territory covered by the salesman, the territory was split up into a great number of smaller routes. This gives flexibility to the whole arrangement.

In the territory covered by this firm in the United States there are seven salesmen and the routes number about 275. This system makes it possible to care for any special part of a territory beginning anywhere, and to cover it effectually without a great waste of money. In fact, the three men that this firm employed before the investigation began spent more money in railroad fare than six men did after this routing system had been completed.

Planning the Work for the Salesman

In the practical working out of the control system each possible customer in each town is listed upon report blanks (Figure 56 a) which contain the essential information regarding the customer. In the data on these forms are in-

cluded the names of the various officials of the company with whom the salesman can do business, number of men employed, average daily production, etc. Blank spaces are provided with appropriate notations, so that the salesman will give to the home office exactly the information it needs without omitting anything important and yet omitting all matters irrelevant to the subject of making sales.

On the back of the form (Figure 56 b) there is a space for other data, such as the number of machines used by this foundry, the type, size, and maker; columns for quotations pending showing the date quoted, number of machines quoted on, the symbol of the machines in question, and the price quoted; with an additional column for any special remarks. Much of the information on this card is filled in at the home office, the object being to co-operate with their salesmen by giving them all the possible information available. The consequence is that the salesman does not waste any of his time doing preliminary work and his time is mainly taken up with actual selling.

Tickler Slips

Attached to the report blank is a tickler stub on which is entered by the salesman the time when the prospect should be interviewed again. This stub is filed in the home office to come up at the proper time and indicate to the office that the salesman should be routed to call on that prospect at that time.

Controlling the Movements of Salesmen by a Route Board

In controlling the movements and work of the sales force a route board with salesmen's "call" cards attached by means of hooks is used. (See Figure 57.) This arrangement effectively visualizes the work of the salesman in the field, showing the amount of work to be done, when it should

THE BUSINESS DEPARTMENTS

1									
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; width: 100px; height: 20px;"></div> </div>									
CITY _____ STATE _____ NAME _____ STREET _____									
TICKLER DATE _____ DATE OF INTERVIEW _____ BUSINESS _____ PRES _____ PURCHAS- GEN. M'GR. _____ ING AG'T. SUP'T _____ FOREMAN _____									
CLASS OF WORK _____									
NUMBER OF MEN EMPLOYED IN FOUNDRY									
BENCH MOLDERS	FLODR MOLDERS	LOAM MOLDERS	BRASS MOLDERS	DRY SAND MOLDERS	CORE MAKERS	MACHINE MOLDERS	HELPERS		
AVERAGE DAILY PRODUCTION IN POUNDS									
IRON	STEEL	MALLEABLE IRON	BRASS	ALUMINUM					
NOTE ANY CHANGES IN ABOVE DATA									
INTERVIEWED MR. _____ DATE _____ THIS VISIT INTERVIEWED MR. _____ TITLE _____ COULD USE _____									
QUOTED ON _____									
WHEN IN MARKET _____ REPORTED BY OUR MR. _____									
SEE OTHER SIDE FOR PENDING QUOTATIONS									

Figure 56. (a) Blank for Salesman's Report on Interview with Prospect or Customer (face)

By using such a form irrelevant data is avoided.

[illegible]

Figure 56. (b) Blank for Salesman's Report on Interview with Prospect or Customer (reverse)

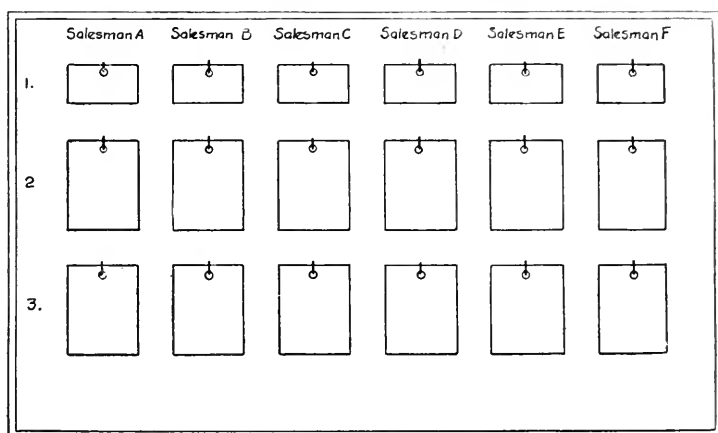


Figure 57. Route Board

The "jobs ahead" are placed on the third row of hooks. When the calls become due they are moved to the second row and made up into routes. When these cards are sent to the salesman the stubs are detached and placed on the first row of hooks.

be done, and finally bringing to the attention of the management how well the salesmen are keeping up to their schedules. It forms the basis of scientific sales planning. It is worked as shown below.

Workings of the Route Board

The card or reports as described above are first posted on the route board on the third row of hooks; these represent the "jobs ahead" exactly as jobs ahead are represented on the route board in factory practice. When the calls come due the cards are moved to hook number 2 and the calls are made up into routes separated by rubber bands. When these cards are sent to the salesman the stubs or ticklers are detached and placed on hook number 1. These stubs therefore show the number of calls the salesman has in his possession. Thus the amount of work on hook number 3 denotes the total amount of work to be done by the salesman; the amount of work on

hook number 2 denotes the work due and scheduled; the amount of work on hook number 1 denotes what the salesman has in his possession.

When there are a great number of report forms on hook number 2 it shows that the salesman is behind on his schedule. If the number of tickler slips on hook number 1 is small, it shows that the salesman is running short of work and that more of the cards on hook number 2 should be sent him. Ordinarily the salesman receives at one time a sufficient number of calls to last him for two weeks. At all times the management keeps in close touch with the salesmen through ad-

○
Date _____
Today
One day ahead
Two days ahead
Three days ahead

Figure 58. Salesman's Daily Address Card

dress cards (Figure 58) sent in daily, giving the address and work for the next two or three days.

Information from the Field

When the salesman returns his report forms the corresponding tickler slips are taken from hook number 1 and a new report form is filled out, ready to be used at the future interview which the salesman already has arranged. On this

av (a co) av

NAME _____

STREET _____

CITY _____ STATE _____

BUSINESS _____

PRES. _____ PURCHAS-
ING AG'T. _____

GEN. M'GR. _____ FOREMAN _____

SUP'T. _____

CLASS OF WORK _____

NUMBER OF MEN EMPLOYED
IN FOUNDRY

BENCH MOLDERS	FLOOR MOLDERS	LOAM MOLDERS	BRASS MOLDERS	DRY SAND MOLDERS	CORE MAKERS	MACHINE MOLDERS	HELPERS		

AVERAGE DAILY PRODUCTION
IN POUNDS

IRON	STEEL	MALLEABLE IRON	BRASS	ALUMINUM

REMARKS _____

Figure 59. Envelope Used for Permanent Record of Prospects and Customers

In which are placed cards containing detailed information about the prospect.

new report form is entered the date of the last interview and also any arrangements that may have been made by the salesman during the last call. In this way the information about this prospect is kept up to date. The new report now takes its place on hook number 3 and by means of a tickler arrangement, it will automatically come up for attention at the proper time.

Permanent Records

That the management may have available as a permanent record all information about each customer, irrespective of the whereabouts of the report form, a special jacket or envelope (Figure 59) for each prospect and customer is used. From these folders is gathered much of the detailed data placed on the salesman's report card.

Within these envelopes are two cards. One of these called the "Record of Calls and Quotations" (Figure 60) gives the date of the last interview, the name of the salesman, the symbol of the machine sold or quoted on, the price quoted, the terms, a space for the date order was received, a space for "lost" orders referring to salesmen's reports regarding this, and a column for the date of the future interview.

The other card, called "List of Machines" (Figure 61) also placed in the jacket, shows the machines used by each foundry, not only such as are made by the firm in question but also those made by competitors.

The jackets and the enclosed cards are kept up to date by copying from the salesmen's report forms as they are sent in, all additional data obtained during the last interview with the prospect.

Flexibility and Efficiency of the System

Thus, when the report cards are forwarded to the salesman as his order to start upon a trip, the office still retains in

its possession all the information relating to the prospects which the salesman has. The system as a whole is extremely flexible, and is so arranged that a salesman may be stopped at any point in his trip and started upon another route to cover an emergency which may have arisen after he started on the trip originally planned. Where such an event takes place, the salesman returns to the office all the cards relating to the prospects which he has not visited, and the office arranges a new route which will include those possible customers at the earliest practicable date.

The clerical labor involved in the routing of salesmen by this method consists of a stenographer and a boy. It is maintained by this firm that while the efficiency of the sales department has greatly increased, the cost is certainly no more, and is probably less than the former method of handling salesmen.

CHAPTER XXV

REWARD AND TRAINING OF THE SALESMAN

REWARD OF SALESMEN

Sales Statistics and Sales Quotas

From one point of view the value of the sales office records may be measured by the uses to which they are put in the way of drawing conclusions based on a statistical presentation of the facts thus gathered. Thus the salesmen's daily reports enable the sales manager to tabulate summaries showing daily progress made by each district. In turn these daily recapitulations are gathered into a monthly report showing the sales according to salesmen and commodities. Upon these items are based the commissions, quotas, or prizes which may be awarded to the salesmen, depending upon the system of records in use.

As a feature in stimulating the field men the statistics may be given a prominent place. The results are frequently published and distributed among the men each month, showing the number of quota points made, the quotas assigned to the various districts, the percentage of quota reached, and comparing the performance of the present month and the year up to date with that of the preceding year and of the same month of that year.

Quota Schemes

A quota is an amount of work over and above the regular assigned task covering a definite period of time. The quota set is generally more or less arbitrary, but since the basis

of determining it is the same for all men and all territories, it is essentially fair. If, for example, a house handles varied lines of goods, it may apply the quota system fairly if it classifies the lines and weighs the different classes according to their value to the business. Or, supposing the sales organization is composed of agents scattered throughout this country, the task of adjustment would involve a careful estimate of the number of sales each resident agent should make in his district and upon this basis the quotas would be set for each one separately and a suitable prize offered for each one that reached it.

Quota Prizes

Quota prizes have the advantage of not emphasizing the commercial nature of the incentive to work. They stress the offer as a reward for winning a game, and so enable the sales manager to appeal to the feelings of sportsmanship among his men. The goal or size of the quota must not, therefore, be too high, or the spirit of the contest will be killed. To insure against asking the impossible, quota prizes, like all other incentives and rewards, must be assigned with due consideration of a large number of factors besides the gross sales. One of these is the cost of securing business. The salesman selling the most goods may not be the highest money producer for the house. Other factors are:

1. Percentage of this year's business to last year's.
2. Amount of territory to be covered.
3. Number of orders taken.
4. Number of orders canceled.
5. Number of bad debts.
6. Number of complaints.

A certain percentage may be assigned to each of these factors depending upon their relative bearing upon the firm's

policies, and the final ranking of the salesman is based upon the sum of all the percentages.

Stimulus and Reward for Salesmen

The control of salesmen at a distance has led to a high development of letter-writing and methods of offering rewards. All the arts known to man have been exploited to keep up the fighting morale of the salesman through letters and rewards. Perhaps the art of writing daily letters in which the human touch must predominate, to a large number of men, has found its highest expression in the "form paragraph," the contents of which may vary from information about the product or a change of price to a "pep talk" or the like. The form paragraph does not, of course, exclude the use of such matter in a letter which is purely personal to the salesman. The use of printed matter other than letters varies from sending the salesman the regular "house organ," to the preparation of a special sales news sheet and special telegraph codes which are to be used in the case of emergency shipments.

Incentives to Stimulate Effort

The methods of direct compensation for salesmen may be divided into three classes: (1) straight salary, (2) straight commission, (3) salary and commission. However, there are many kinds of incentives used to stimulate effort. In spirit and kind these methods do not differ from the premium of the factory laborer or bonus of the office employee. The difference lies chiefly in the basis upon which the commission and the quotas are figured.

The difficulties with all schemes which depart from the straight salary basis lie in the many factors which must be considered before an equitable adjustment can be made. The average salesman is employed in securing the signatures of

prospects and the work involved depends upon two general considerations: (1) business which would come naturally to the company; (2) business which would not come to the company unless real selling ability was used by the salesman.

The term "selling ability" is not usually limited to the getting of new orders, but to the keeping of old customers as well, and it is here that complications arise in trying to establish a basis for estimating commissions or quotas. Often the salesman's time is employed more profitably, so far as the company is concerned, in settling disputes, suggesting changes in, and improved methods of, using the product, and the like. Therefore, all commission or quota schemes must be based upon more or less arbitrary decisions or judgments.

Commissions and Bonus

A salesman's commission is his salary figured on a piece-rate basis. Piece-work by a salesman means either the number of his sales or the money value of his sales reckoned over a definite period of effort. Two examples will explain the methods which lie at the basis of all quota or commission schemes of payment. The first case below is chosen as an example because of the comparative ease with which the product can be measured. The units are uniform and the general conditions of marketing and use are not impossible of determination.

METHOD OF COMPENSATION, SALARY, AND COMMISSION*

Class	Points
A Additional consumption, either gas or electric (present consumption)	5
B New contracts, gas or electric, where service was not previously in use.....	3
BB Industrial fuel gas.....	7

*Gas and Electric Company of Denver.

C	Replacing service or equipment for old or new party, where formerly in use.....	1½
D	Present users, changed to other address.....	1
E	Outlining on buildings.....	6
F	Outlining on present signs where flat against the building	5½
G	Outlining present projecting signs.....	5

The above schedule shows different classifications arranged as to their relative value to the Company. Take, for instance, Class A, additional consumption. Let us assume that a consumer who is now using illuminating gas is persuaded to put in a gas range, and the estimated consumption of gas upon that range is 20,000 cu. ft. per year; figured on 5-point basis, the representative is entitled to 100 points for securing this business. All other classifications are figured accordingly. A record is kept of the points secured by each representative, and at the end of each month it is determined what percentage each representative is entitled to, as compared with the total business secured. As an illustration of the above, let us assume that for the month of December there were 60,000 points of estimated business secured. We will further assume that one representative secured of that amount 6,000 points. That is, he produced 10 per cent of the estimated business. Now let us assume that for the month of January the Company has an increased gross revenue of \$15,000, which we will say was due to natural causes and the work done by the representatives during the month of December.

We will now see how we are to pay the representatives. We will assume it is agreed by the Company that the representatives are to have 5 per cent of the Company's increased gross revenue as a bonus. This 5 per cent of \$15,000, \$750, is given them as bonus money, to be divided among them according to their percentage of the business secured. Thus, the representative above mentioned, having secured 10 per cent of the business in December, would be entitled to 10 per cent of the bonus money secured in January, or \$75, which would be paid him February 5.

In addition to the bonus, representatives are paid a flat salary of \$60 per month. Thus you will see that this man would receive for his December work a salary of \$60 plus a bonus of \$75, or a total of \$135.

Observe that the work and business secured by the representative in the month of December ought to show in the Company's increased revenue during the following month of January, and between the first and fifth of February we can determine from the books the amount of increased revenue; therefore we are able by the fifth of February to make settlement as outlined.

Bonus Method of Payment

A second example based on the value of products sold is seen in department stores and other concerns selling a varied line of products. Here the number of pieces sold would be all out of proportion to the sales effort necessary to dispose of them. It is considered more equitable if the sales effort be measured by the value of the goods sold.

Other lines such as books and insurance are put usually on a straight commission basis reckoned at a certain percentage of the value of the product. Based upon this principle a sales manager handling a number of specialty salesmen on a commission basis has worked out an ingenious bonus system.* The grading up of his sales price, necessitating the grading up of commissions, gave him his opportunity to work in this bonus without increasing his percentage of commission on sales.

The monthly volume bonus, as it is called, works out this way:

12 sales in one month, a bonus of \$.50 on each sale										
15	"	"	"	"	"	"	"	1.00	"	"
18	"	"	"	"	"	"	"	1.50	"	"
21	"	"	"	"	"	"	"	2.00	"	"
24	"	"	"	"	"	"	"	2.50	"	"

The effect is further illustrated by this explanatory table:

Class	E	D	C	B	A
Sales a month.....	12	15	18	21	24
Bonus for sale of.....	\$.50	\$ 1.00	\$ 1.50	\$ 2.00	\$ 2.50
Or a total bonus for month of.....	6.00	15.00	27.00	42.00	60.00
				(or more)	

Which means that three sales from
one point to another are worth
aside from the commissions thereon

9.00 12.00 15.00 18.00

*Business Progress Bulletin, Alexander Hamilton Institute, 1918.

Note especially how easily attainable the lower classes of bonuses are. They are especially planned so that the great majority of the men in the organization will be bonus men of one class or another every month. This illustrates the principle "attainability."

In practice it has been found that the members of the organization are more desirous of being listed in the concern's weekly sales bulletin as Class A bonus men, than they are concerned over the monetary value of the bonus that goes with that class.

Furthermore, if they have attained Class C with two days of the month to go, they make one last effort to attain Class B before the books close. If a salesman passes his "baby" bonus, as Class E has been affectionately termed, early in the month he is likely to brag about it in his letter to the house and prophesy Class A for himself for the month. In other words, the plan seems to comply with the principle of providing an immediate incentive at any time of the month irrespective of the individual's production.

Both of the methods given above have been modified by the addition of a bonus to a salary on a commission basis.

Monthly statements should be sent to a salesman working on a commission basis, giving the exact dates and status of his account. Direct expenses of every sort should be charged against the salesman's commission, in each territory. He should be allowed to draw on his account within specified limits, final settlements to be made periodically.

TRAINING OF SALESMEN

Training Salespeople

Training courses are part of every sales organization of any importance today. They may vary in length of training and in number of subjects taught, but big business has long

ago lost its indifference to the training of its sales representatives. While it would be interesting to take up all the phases of salesmanship education, it will be necessary to confine this discussion to the outline of such courses.

Two courses of training at once differentiate themselves: (1) the specialty and staple salesman, and (2) the retail store salesman.

Training of Specialty Salesmen

The selection of men and the preliminary preparation are necessary antecedents to a satisfactory procedure of intensive training. The right material and the proper seasoning are essential. A month's contact with the prospective salesman before systematic courses are begun is not too much in which to inspire him with confidence in the firm's policies, ideals, and its product. In this time he can become acquainted with the house organ, the selling equipment, the personality of the sales manager, and the standard presentation of the selling talk. At the end of this time he can be brought into a class for instruction, and when this is completed given a further trial under the guidance of a coach in the field. This at once suggests that every well-organized course should provide a class leader and a field coach.

Training at the Home Office

The subjects covered by a course of house training should be broad enough to cover all parts of the organization, but the time devoted to particular phases will be short (perhaps one lesson or part of a lesson only), depending upon its relative importance. In general, the course should cover:

1. Theory of salesmanship
2. Practical selling
3. Analysis of the product

4. Knowledge of house policies
5. Study of competitive products
6. Knowledge of marketing policy of the house

A Practical Working Outline

The following outline has been used successfully for a number of years by Raymond J. Comyns, Assistant Sales Manager of the Alexander Hamilton Institute:

THEORY AND PRACTICE OF SALESMANSHIP

I. THE SELLING PROCESS

1. Development of a Sale
 - (a) Attention
 - (b) Interest
 - (c) Desire
 - (d) Confidence
 - (e) Close
2. Preliminary to the Interview
 - (a) Preparation for the Interview
 - (b) Studying the Prospect
 - (c) Gathering Information
 - (d) Using a Card Index
3. Getting to See the Buyer
 - (a) Men Hard to See
 - (b) Tactics to be Avoided
 - (c) Use of Telephone and Business Card
 - (d) A Dignified Bearing
 - (e) Securing Favorable Conditions for the Interview
 - (f) Using Co-operation to See the Prospect
 - (g) Individuality in Announcing Oneself
4. The Approach Proper
5. The Interview
 - (a) Attention; Its Nature
 - (b) Conditions Favorable to Attention
 - (c) The Use of the Business Card
 - (d) The Handshake
 - (e) Transferring the Prospect's Attention to the Goods

- (f) The Opening Talk
 - (g) Securing Prospect's Participation in Sale
 - (h) The Importance of the "You" Attitude
- 6. Interest
 - (a) Presentation
 - (b) Demonstration
- 7. Meeting Objections
 - (a) Anticipating the Objection
 - (b) When to Mention Price
 - (c) The Unreasoned Objection
 - (d) Tact in Opposing the Prospect
 - (e) Avoiding Negative Suggestions
 - (f) Discussing Competitor's Goods
 - (g) Minimizing Objections
- 8. Desire
 - (a) Ripened Interest
 - (b) How Secured
 - (c) Desire and the "You" Attitude
 - (d) How Indicated
- 9. Close
 - (a) The "Decision on a Minor Point" Principle
 - (b) The "Write the Order" Method of Close
 - (c) Courage and Positive Suggestion
 - (d) Mechanics of the Close
 - (e) Make Decisions, Do Not Expect Them
- II. CONCURRENCE OF BUYER AND SELLER
 - 1. Persistence of the Right Kind
 - 2. After the Sale
 - (a) Furnishing Additional Information
 - (b) Securing Co-operation
 - (c) Leaving the Right Impression
 - 3. Starting the Bill
 - 4. Getting the Price
 - 5. "Think It Over" and the Call Book
 - 6. Creative Salesmanship
- III. HUMAN APPEALS THAT SELL
 - 1. Warm Friendship versus Cold Science
 - 2. Securing Prospect's Respect and Admiration
 - 3. Securing the Prospect's Friendship

4. The Sincere Compliment
5. Appealing to Self-Esteem
6. Appealing to Acquisitiveness and Desire for Profit
7. Appealing to Love of Home and Family
8. Appealing to the Imitative Instinct
9. Other Appeals Possible
 - (a) Appeal to:
 - Intellect
 - Logic
 - Argument
 - Reason
 - (b) Appeal to the Imagination or to Emotions
 - (c) Positive Suggestion

IV. ESSENTIAL QUALIFICATIONS OF SALESMEN

- | | |
|------------------|-----------------|
| 1. Health | 10. Confidence |
| 2. Preparedness | 11. Enthusiasm |
| 3. Ambition | 12. Loyalty |
| 4. Application | 13. Optimism |
| 5. Observation | 14. Imagination |
| 6. Tact | 15. Education |
| 7. Concentration | 16. Voice |
| 8. Courage | 17. Appearance |
| 9. Honesty | 18. Personality |

Size of Class and Length of Time

Both of these elements will vary with conditions, but experience proves that they do not differ materially from the practice of educational institutions, allowing for the maturity of the students. Two weeks is a common period devoted to house training and a class consisting of 12 to 20 men produces the best results. This permits each man to come into personal contact with the teacher, the sales executives, and other members of the home staff. This is also an economical number considered from the point of view of expense. The time of holding training classes should be carefully determined, for in this way a dull season can be profitably utilized in training, and usually the training period will coincide with the time of

holding the yearly sales convention. At that time the men get the added impetus of strong emotional surroundings—star salesmen, ginger talks, “experience meetings,” and the like.

Training of Retail Salespeople

The method of approach to the training of retail salespeople is somewhat different from that used in training specialty salesmen. In the first place the retail sales person remains in close association with the home office and can be given longer and perhaps more extended instruction about the product itself and its commercial possibilities. The following outline which has been carefully worked out by the Committee on Retail Salesmanship of the National Association of Corporation Schools is the most comprehensive attempt to meet the demands of the larger department stores of America.

SYLLABUS IN TEXTILE MERCHANDISE COURSE

Purpose: To present to pupils information concerning the sources of supply, methods of manufacture, and uses of textile merchandise, with special reference to its commercial handling and classification.

Time: Two periods per week (total 20 weeks).

Method:

By the use of text-books and mimeographed notes.

By the use of illustrative material.

By the co-operation of the heads of textile departments of the store.

I. COTTON GOODS

1. History
2. Sources of Supply
3. Manufacture
 - (a) Centers of Industry
 - (b) Processes (spinning, weaving, dyeing, printing, adulterations)
4. Uses
 - (a) Materials for Furnishings
 - (b) Wearing Apparel
 - (c) Tests, Laundering, and Care

II. LINEN GOODS

1. History
2. Sources of Supply
3. Manufacture
4. Uses
 - (a) Materials by the Yard
 - (b) House Linens, Made Up (table, bed, towels, fancy linens)
 - (c) Wearing Apparel
 - (d) Tests, Laundering, and Care

III. SILK GOODS

1. History
2. Sources of Supply
3. Manufacture
4. Uses
 - (a) Material by the Yard
 - (b) Knitted Underwear and Hosiery
 - (c) Velvets
 - (d) Tests, Cleaning, and Care

IV. WOOLEN GOODS

1. History
2. Sources of Supply
3. Manufacture
4. Uses
 - (a) Material by the Yard
 - (b) Knitted Goods, Underwear, Hosiery, etc.
 - (c) Blankets
 - (d) Tests, Cleaning, and Care

V. LACES

1. History
2. Sources of Supply
3. Raw Materials
4. Manufacture
 - (a) Centers of Industry
 - (b) Processes:
 - Real Hand-Made Lace
 - Machine-Made Lace
 - Imitation Lace
 - (c) Comparison between Real and Imitation Lace
5. Classification and Uses of Finished Product

VI. CARPETS AND RUGS

1. History
 2. Raw Materials
 3. Manufacture
 4. Classification and Uses
-

SYLLABUS IN NON-TEXTILE MERCHANDISE COURSE

Purpose: To present to pupils information concerning non-textile merchandise, as with textile departments.

Time: Two periods per week (total 20 weeks).

Method: As in textile merchandise.

I. REVIEW WORK ON MATERIALS AS GIVEN IN GENERAL SCIENCE COURSE

II. CHINA AND GLASSWARE

1. Materials and Sources of Supply
2. Manufacture
 - (a) Centers of Industry
 - (b) Processes
3. Classification and Uses (table china, household, art pottery, glassware, lamps)

III. SILVERWARE AND JEWELRY

1. Materials and Sources of Supply
 - (a) Metals
 - (b) Precious Stones
 - (c) Sundry Materials
2. Manufacture (as above)
3. Classification and Uses (silverware, table silver, etc.)

IV. LEATHER GOODS—SHOES, AND GLOVES

1. History, Sources of Supply, etc.

V. RUBBER GOODS

1. History
2. Sources of Supply
3. Manufacture
 - (a) General Processes
 - (b) Special Process (hard and soft rubber)
 - Rubberized Cloth
 - Rubber Boots and Overshoes
 - Toilet Articles
 - Household Articles

VI. WOODENWARE AND BASKETS

1. Classification and Uses
 - (a) Household Woodenware
 - (b) Willow ware and Baskets

VII. PAPER

1. History, Sources of Supply, etc.
-

SYLLABUS IN SALESMANSHIP AND BUSINESS ORGANIZATION

Purpose: (Salesmanship) To present to pupils examples of practical selling through type cases, and from them to discover the principles of good salesmanship, its ethics, the qualities required of salespeople, and the steps in a sale.

(Business Organization) To follow business organization from the organization of a department store through wholesaling to manufacturing, so that pupils may have a clear outline of the organization of retail selling and a general view of the business world.

Time: Two periods per week in alternate weeks during the third year of high school (total 20 weeks).

Method: By the case system, accompanied by text-book references and discussions.

FIRST SECTION—SALESMANSHIP

I. PROCESS OF SALE (Illustrated by type cases treated as problems)

A—System

1. Normal Cash Sale—Taken or Sent
2. Special Order for Later Delivery
3. Normal Charge Sale—Credit
4. Engravings (silver, ivory, etc.)
5. Repairs of Various Kinds
6. Alterations on Suits and Other Clothing
7. Transfers—Sent or Taken
8. C. O. D. and Bill for Collection
9. Special Deliveries to Customers, etc.

B—Merchandise

1. Staple Goods
2. Novelties
3. Special Sales

C—Customers

1. Critical Customers
2. Dependent Customers
3. Difficult Cases
4. Mail-Order Purchases
5. Telephone Orders
6. Personal Service (guides)
7. Interpreters, Different Nationalities
8. Complaints from Customers

II. FORMULATION OF PRINCIPLES FROM ABOVE

1. Modern Methods of Selling
2. Proper Attitude of Sales Clerks
 - (a) Toward Store
 - (b) Toward Customers
 - (c) Toward Fellow Employees

III. REQUISITE QUALIFICATIONS OF SALES CLERKS

1. Personal Characteristics
 - (a) Initiative
 - (b) Judgment
 - (c) Enthusiasm
 - (d) Energy
 - (e) Tact
 - (f) Cheerfulness
 - (g) Attractive Appearance
 - (h) Accuracy
2. Good Habits
 - (a) Courtesy
 - (b) Promptness
 - (c) Carefulness
 - (d) Self-control
 - (e) Neatness
 - (f) Regularity
3. Necessary Knowledge
 - (a) Good English
 - (b) Good Penmanship
 - (c) Local Geography
 - (d) Arithmetic
 - (e) Store System
 - (f) Store Policies
 - (g) Human Nature
 - (h) Merchandise

IV. POINTS OF A SALE

1. Approach to Customer
2. Presentation of Merchandise
3. Attracting Attention
4. Arousing Interest
5. Creating Desire
6. Closing a Sale

V. WASTE IN BUSINESS

SECOND SECTION—BUSINESS ORGANIZATION

- I. INTRODUCTION (Briefly trace the course of retail selling from a simple beginning of a small store with proprietor and one or two assistants, handling one line of merchandise, gradually adding related lines and then unrelated lines as the opportunity presented itself, to the more complex organization of the modern department store.)

II. RETAIL SELLING

A—Department Store

1. Its Function
2. Organization (chart showing organization and the interrelations of various departments)
 - (a) Administration
 - (b) Merchandising
 - (c) Superintending
 - Selling
 - Non-selling
 - (d) Accounting and Auditing
 - (e) Advertising
 - (f) Store Service
 - To the Public
 - To the Staff
 - (g) Conditions of Service
 - Environment
 - Remuneration
 - Opportunities for Advancement
 - Comparison with Other Vocations

B—Chain Stores

1. Function of Business Compared with that of Department Store

2. Organization Compared with that of Department Store
 - (a) Points of Resemblance
 - (b) Points of Difference and Reasons
3. Service Rendered to the Public; Advantages and Objections

C—Mail Order House

(Same as above)

D—Specialty Shops

(Same as above)

III. WHOLESALE SELLING

1. Function of Business
2. Organization
 - (a) Executive
 - (b) Selling
3. Relation to Retail Selling
4. Relation to Manufacturing
5. Comparison of Organization with that of Retail House
6. Advantages and Disadvantages

IV. MANUFACTURING

1. Introduction (brief sketch showing development of the modern factory)
2. Organization
 - (a) Executive
 - (b) Production
3. Relation to Wholesale Selling
4. Relation to Retail Selling
5. Direct or So-called "Direct from Manufacturer to Consumer"

These lessons, arranged to suit the local conditions, should be accompanied by presentations of matter bearing upon (1) the general science features connected with materials; (2) principles of design and principles of color as applied to manufactured forms: millinery, women's dress, accessories, etc.

The particular object aimed at in this work is to show each prospective saleswoman that in matters esthetic and utilitarian she frequently must play the part of the teacher, but must play it in so tactful and skilful a manner that the customer will welcome the information given and will be led,

naturally, to make a wise choice among the objects offered for sale.

Special Data

The sales department must make provision for the collection and filing of a great deal of scattered and varied data. Thus, for example, a complaint file, schedule file, a house organ material or suggestion file may be kept. Some disposition must be made of the memos, requisitions, salesmen's "missionaries," and field reports. The equipment and system used will depend upon the requirement of the business. In some cases the sales department performs the most important functions of the advertising department, the latter in this case simply writing copy and performing incidental advertising routine. The sales department in this particular instance may keep a file of addresses and circulars of sign novelty and auxiliary service concerns, periodical rate and circulating data of advertising mediums, cuts, drawings, etc. The data required will depend upon the product, the policy, and the method of carrying out the sales campaign.

CHAPTER XXVI

WORK OF THE SALES PROMOTION DEPARTMENT

Purpose of Sales Promotion Department

Concerns manufacturing a product in wide demand find that the effectiveness of a selling organization is often greatly increased by the creation of a new office department—the sales promotion department. While as yet confined to only a few of the larger corporations, this latest division in the sphere of office work has evidently come to stay. Such a department is perhaps not suited to every class of business, because its activities so far have been confined to the sale of a specialized or technical product where the sales are made individually to dealers or consumers rather than *en masse* to jobbers and wholesalers.

Functions of Sales Promotion Department

Succinctly stated, the function of the sales promotion department is to find the prospective customer and cultivate his good-will. These customers are recognized by some expression of their interest, usually in the form of a request for a catalogue or booklet or for information about the goods. As the work of the advertising department is to create this interest and its duty generally ends when an inquiry has been attended to (unless the advertising manager is unusually systematic and versatile, with a broad conception of his responsibilities and duties), it has become necessary to delegate to a person or department the function of nursing this inquiry to the order-producing stage. At this point the sales department generally takes hold and closes the deal.

Benefit Derived from Promotion Work

Thus it is seen that promotion work, while it is distinct from both advertising and sales, partakes, to a degree, of both. It is a link in the marketing process that too often is neglected. It has its being in the recognition of E. H. Harriman's dictum, "Much good work is spoiled for the lack of a little more." The promotion department goes over with a fine-tooth comb the territories that it would be impossible or impracticable for a sales or advertising department to work intensively. The result is larger returns for the advertising appropriation and less expense in turning inquiries into orders. This reduction is due to the fact that promotion work, being of a comparatively simple and routine character, can be carried on more effectively and at less expense in a department of its own than when amalgamated with the active work of the advertising department or the technical work of the sales department.

Relation to Sales and Advertising Departments

The relation of the promotion department to the advertising and sales departments differs in almost every business. In some cases the promotion work may be under the control of the advertising manager but as the details increase in number a separate organization generally evolves under its own head. In other cases such a department has been started as a separate unit but eventually placed under the control of the advertising department. A great deal depends upon the relations existing between the promotion work and the sale of the product.

If the work is likely to result in an immediate sale, it would seem that the logical head of the department should be the sales manager. But if results are looked for in the more or less distant future and the advertising is of a more

or less educational type, the work can best be managed in a separate department.

Work of Department

The work of the promotion department, whether assigned to a single person in a small organization or to the complete department of a large concern, covers many activities the nature of which is indicated by the following instructions issued by a manufacturing concern :

Develop new customers :

- I. Nurse the leads or inquiries received from the advertising department into sales or prospects ready for closing by the sales staff.
 - (a) By *orally* "putting across" the messages of the salesmen.
 - (b) Do whatever educational work the product requires.

Stimulate :

- I. Old customers
 - (a) Study their needs and show them how to do better business.
 - (b) Send them appropriate advertising matter.
 - (c) Suggest more effective window displays, etc.
 - (d) In general, increase business by approaching the dealers from their point of view.
2. Salesmen
 - (a) Send to salesmen any information that may prove of value in their territory.
 - (b) Give notice of plans.
 - (c) Suggest methods of doing more effective work.

3. Advertising and sales department
 - (a) Supply any information that may prove effective in improving their work.
 - (b) Correlate the activities and bolster up any weakness.
 - (c) Give notice of plans.
 - (d) Give them the mental perspective of changing conditions and new discoveries and prevent them from getting into a rut.

Method of Inaugurating Promotion Work

Promotion work often begins with the creation of a "service department" in which the handling of complaints or inquiries from customers is centered. In other cases a "prospect department" is created to follow up inquiries about goods and thus aid both the advertising department and sales department in closing sales. Another method of organization is to segregate the work of preparing lists of prospects, attending to their proper classification, filing, etc., and following up correspondence with dealers, individual customers, etc.

Duties of Personnel

The advantages of placing the details of promotion work under the control of a central authority which gives its energies solely to co-ordinating the activities relating to the search for customers and the cultivation of their good-will are obvious. The nature and scope of the work involved can be judged by the following list of instructions covering the handling of correspondence, as summarized by one concern:

RECORD CLERK'S DUTY CARD

1. Receive incoming mail.
2. Check calls on cards.
3. Check correspondence incoming.
4. Attach to incoming letters any filed correspondence on hand.

5. Check orders.
 6. Check correspondence outgoing.
 7. Sign letters.
 8. Look after reports:
 - (a) Expense
 - (b) Correspondence
 - (c) Territory
 9. File.
 10. Fill out cards.
 11. Keep up records.
 12. Order stock.
 13. Look after stock.
 14. Look after follow-ups:
 - (a) Monthly ticklers in files
 - (b) Desk jogger
 - (c) Telephone
 - (d) Salesman's envelopes
 - (e) Outgoing mail
-

CORRESPONDENT'S DUTY CARD

1. Handle and reply to letters from:
 - (a) Customers
 - (b) Salesmen
 - (c) Miscellaneous sources
 2. Promotion work:
 - (a) Prospective customers
 - (b) Active customers
 3. Offering suggestions to active customers.
 4. Offer advertisements in various forms:
 - (a) Prospective customers
 - (b) Active customers
 5. Follow salesmen and territory by noting route lists and following routes.
 6. Correspondence with salesmen.
 7. Analysis of reports.
-

STENOGRAPHIC DUTY CARD

1. Transcribe letters of correspondent
2. Handle multigraph letters
3. Copy letters
4. General secretarial work

Handling of Correspondence and Advertising Matter

Much of the promotion work involves the handling of correspondence and the mailing of advertising matter. When the volume of this material is such that several clerks are required to take care of it, it may be segregated something after the following fashion:

1. By classes of trade.
2. By territory into two or three sections.
3. By separating the mechanical promotion work.
4. By dividing the territory and separating the mechanical promotion work.

When it is necessary to employ correspondents, it may be advisable to place them under the supervision of a chief correspondent. In a similar manner departments may be created to take care of the filing and the keeping of the card records.

Co-operating with Retailers Through Promotion Department

In carrying out the main work of the promotion department, that of following up prospects in the field, there are different methods of helping retail customers—either directly or through the intermediary of salesmen or a combination of both methods. Direct contact with the customer is usually made by means of:

1. Advertising material such as signs, booklets, circulars with a description of how to use the material most effectively.
2. "Ready made" advertisements and electros to enable the dealer who "knows nothing about advertising" to carry on an efficient newspaper campaign.
3. By procuring a list of the store's customers and advertising the product or some special offer direct by mail.

4. By studying the special problems of customers and showing the retailer how to solve them.

Work of this nature is obviously of great value in building up good-will. It is a recognition of the fact that every merchant cannot be a John Wanamaker. If he were he would not be the proprietor of a small store. The larger means, the wider business experience, and the ability to pay for expert advertising service, enable the manufacturer to help the present or prospective customer in ways which would be prohibitive to the small storekeeper whose resources are more or less limited. The benefit to the manufacturer though indirect is none the less substantial as his own prosperity depends upon the business ability and prosperity of his retail customers.

Follow-Up of Salesmen

In every selling campaign to retailers no factor is of more importance than close co-operation between the work of outside representatives and that of the promotion department. Team-work in a selling force depends upon keeping the individual salesmen posted on the trend of trade in other men's territories and telling them how other salesmen win out. Example is at all times better than precept. If at the same time each salesman is kept informed of prospective customers along the route and new customers are carefully nursed by means of promotion work into steady buyers whose repeat orders can be depended upon, the creation of a sales promotion department is more than justified by this branch of activity alone. The ordinary way of keeping in touch with the salesman is by:

1. Keeping him informed of what work is being done by the promotion department in his territory.

2. Sending him copies of letters written to customers and prospects in his territory.
3. Making suggestions covering their investigation as to points of appeal, etc.

The effect of this work is seen in the increased pull of the whole selling force and the improved results from a follow-up campaign.

Follow-Up of Customers

The follow-up work in connection with advertising and selling is one of the activities of sales promotion which most effectively co-ordinates the more or less disjointed efforts of the advertising and the sales departments. To show what some firms are doing in this direction the following example is instructive.

The system as used by this firm includes a weekly report to the promotion department from each of the concern's branch houses. This report, which is made on a blank form entitled "Record of Inquiries Received and Sales Made from Prospects," shows the territory of salesmen, source of inquiry, key number and lot, if any, number of inquiries received, and amount of sales resulting therefrom. The information contained in the salesman's daily report is embodied in the weekly report of the branch houses.

The policy of the firm is closely controlled by carefully worded instructions covering the writing of original letters and distribution of form letters and circular matter as shown below.

INSTRUCTIONS FOR FOLLOW-UP WORK

1. Study the original advertisement that brought the inquiry and word the letter so as to be in the spirit of the advertisement which aroused the interest of the writer and conforming also to the characteristics as shown from the inquiry. Then write a letter that will educate and compel

a reply. No headway is made unless your letters bring replies.

2. Same date as inquiries are received write first form letter to prospect.

3. Also write first form letter to the salesman.

4. One week later write second form letter to prospect.

5. Write second form letter to salesman.

6. Inquiries that are too indefinite to hand to salesmen can be developed by a judicious use of form letters and handed to the salesman ready for closing.

7. The tone of your letter should always be worded so as to compel the prospect to reply.

8. Even if a prospect has been informed that a salesman will call, word your letter so that you may be able to draw forth a reply in case the salesman should fail.

9. Always leave an opening so that the prospect will feel at liberty to write again for some information should the salesman fail to call.

10. If four follow-ups on one article do not bring a reply, try a fifth follow-up on a different article.

11. The proper enclosures, gaged by the business of the present inquiry, might bring business for other articles than that in which the prospect is at first interested. That is to say, while the inquiry is about a scale, an enclosure for an engine might result in a sale.

From the above extract it will be seen that this concern leaves much to the judgment and initiative of those who write the letters and select the enclosures. The size of the business permits this to a greater extent than is advisable in a company doing a very large business and where great economy must be exercised in handling advertising matter. Careful planning in the preparation and handling of lists of names and in routing the follow-up letters are essential here and little should be left to the judgment and discretion of the correspondence force.

Planning a Follow-Up System

The successful operation of follow-up systems depends in a large measure upon the ability to handle large numbers

of names at a comparatively low cost per prospect. The use of form letters and the reduction of the routine to a system of automatic control are means to this end.

In producing a series of form letters that will answer the bulk of the correspondence, the inquiries must be carefully analyzed and provision made for dividing them into classes. This is to insure the separation of letters needing "personal attention" from those needing only the formal reply. To make the system work almost automatically and with the exercise of as little thought as possible, the routine of keeping after prospects should be "blue-printed." The head of a large mail-order house has perfected the following scheme for making sure that the prospects of his firm get their letters on time. He has "blue-printed" the procedure to be followed in caring for the five types of inquiry received. The system is simple and the control is effected by a single tickler card file. The five classes of prospects are:

1. New dealers.
2. Dealers who ask for catalogue.
3. Dealers asking for quotations.
4. Users from dealers' lists.
5. Users who write direct.

Charts mapping out the course and the procedure to be followed at each step in handling each of these classes have been carefully developed. The prospect cards, as shown in Figure 62, are very simple in their make up, the chief item being the date when the last letter was sent. Upon this the work of the follow-up system hinges.

In the matter of follow-up of inquiries a very important detail with some firms is keeping a record of each series of letters which are sent out. This record should show the following:

1. Number of letters sent out each day for each series.
2. Returns for each series as they come in each day.
3. Totals of letters of each series should be compiled at the end of each month.
4. Total cash produced by each series each month.
5. Percentage of sales to letters of each series.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30			
Town										State										File No.												
Name										Street or Company																						
Business										Rating or Reference										Freight Rate												
We wrote																																
They wrote																																
We wrote																																
They wrote																																
Source of Inquiry										Date of Inquiry										Ordered												
Remarks																																

Figure 62. Prospect Card

A card is used for each prospect. It shows the date when the last letter was sent. Used with the blue-print sheets, it makes the follow-up practically automatic.

Such a record will tell at a glance when a letter in a series becomes unprofitable and which letter pulls best. Also it will show how far the series can be extended profitably. Thus, for example, a firm that has been content to send out only a series of say four letters may find with surprise that these just begin to scratch the surface and that if extended to a series of fifteen letters, the fourteenth might pull in the most business. Such a record of follow-ups is an invaluable feature of the

larger mail-order houses and undoubtedly can be utilized in every business that handles inquiries or does any promotion work. Besides it is important to know when a certain letter in a series becomes played out. This can be seen if a letter record is kept. The moment it begins to lose its pull, it should be replaced with a new one.

The Handling of Inquiries by Form Letters

The chart (Figure 63) which shows the course of the letter and follow-up to be effected in securing new customers assumes that a list of names has been secured—a matter which will be taken up later.

The first mailing contains a letter stating the purpose of the correspondence and a return card upon which the dealer indicates his interest in the proposition. Each of these cards is clipped 15 days ahead of the date the letters were mailed. If a reply comes back on the return card, mailing No. 2 is then sent out immediately; if no reply comes in at the end of 15 days, the prospect is sent mailing No. 3, and so on to the end of the series. As the prospect card always shows which form letter has been sent, the follow-up becomes practically automatic, it being simply a matter of looking at the blue-print and the card of instructions.

Each stenographer is equipped with a portfolio containing the blue-prints and a complete set of form letters and enclosures. No judgment need be exercised. The instructions are definite and so simple that a new girl learns the procedure by simply going over the details once with her instructor. This is possible because the inquiries are sorted, as before explained, and those requiring personal attention are forwarded to the proper departments. Inquiries requiring personal attention are taken care of by substituting for the form letter a personally dictated letter which is included in the mailing along with the other matter. In this way the follow-

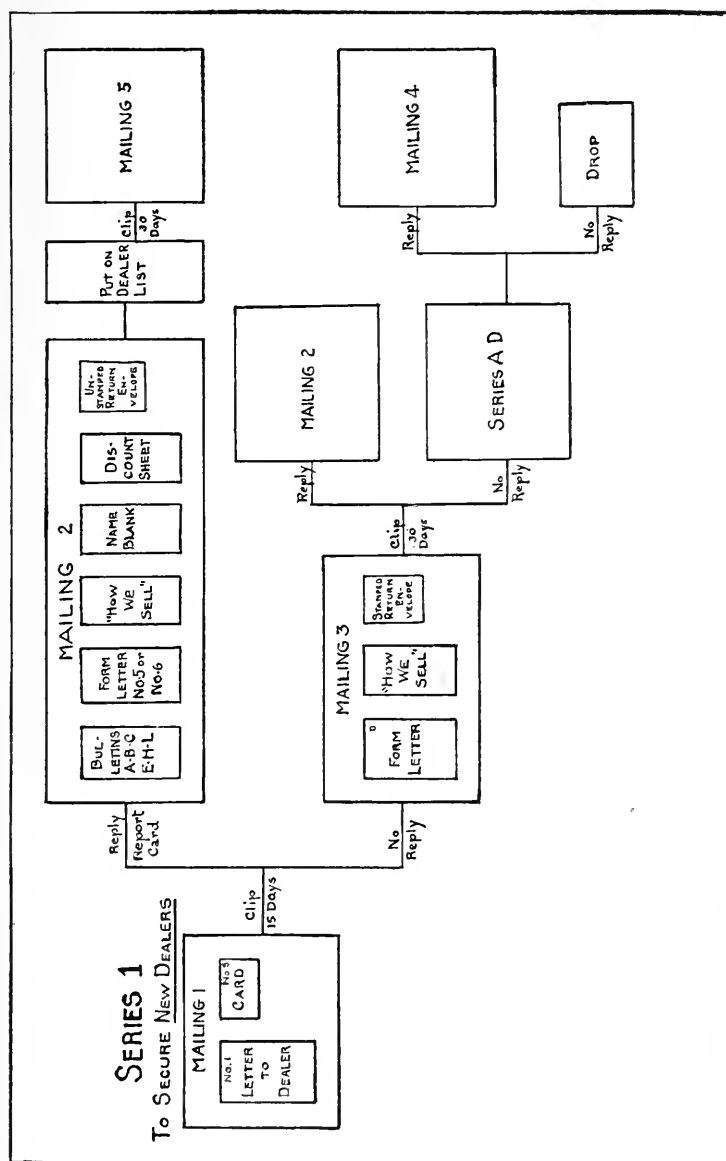
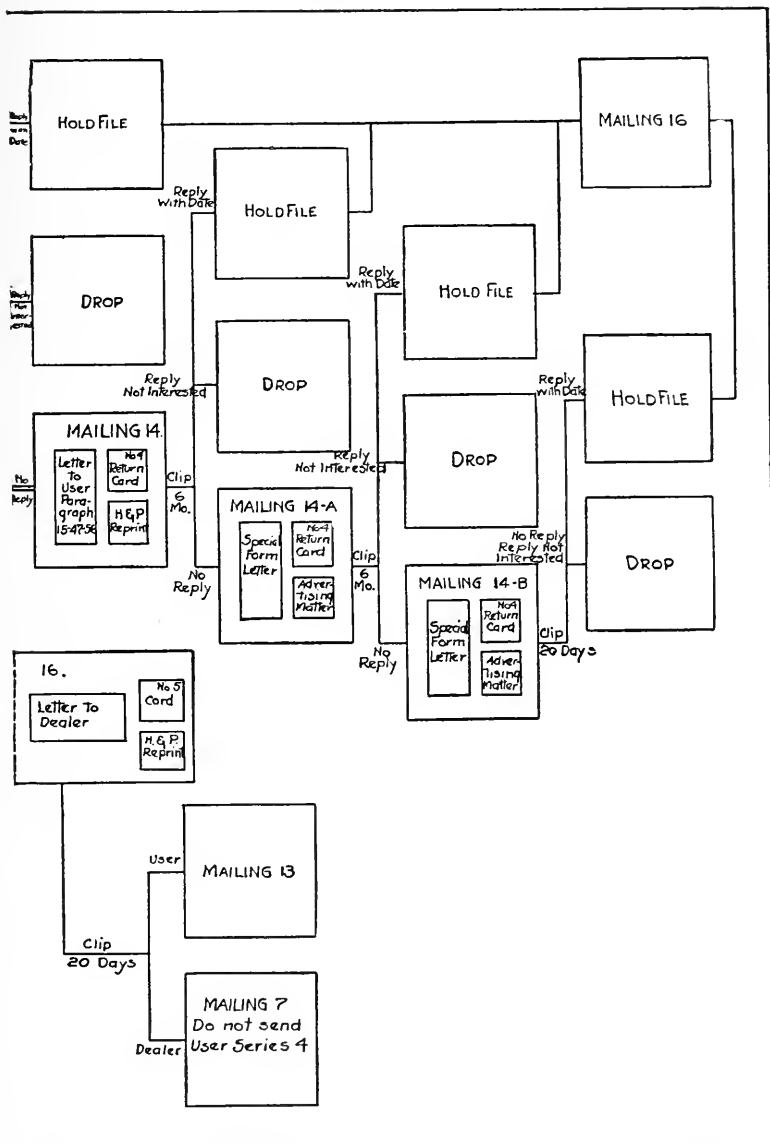


Figure 63. Chart of Course of Letter and Follow-Up for Securing New Customers
A mailing list once secured, this series becomes practically automatic, as almost every contingency has been foreseen and the stenographer has only to follow this chart and a card of instructions.



Series of Letters to Users

provided for in dealing with a particular series of letters and follow-ups.

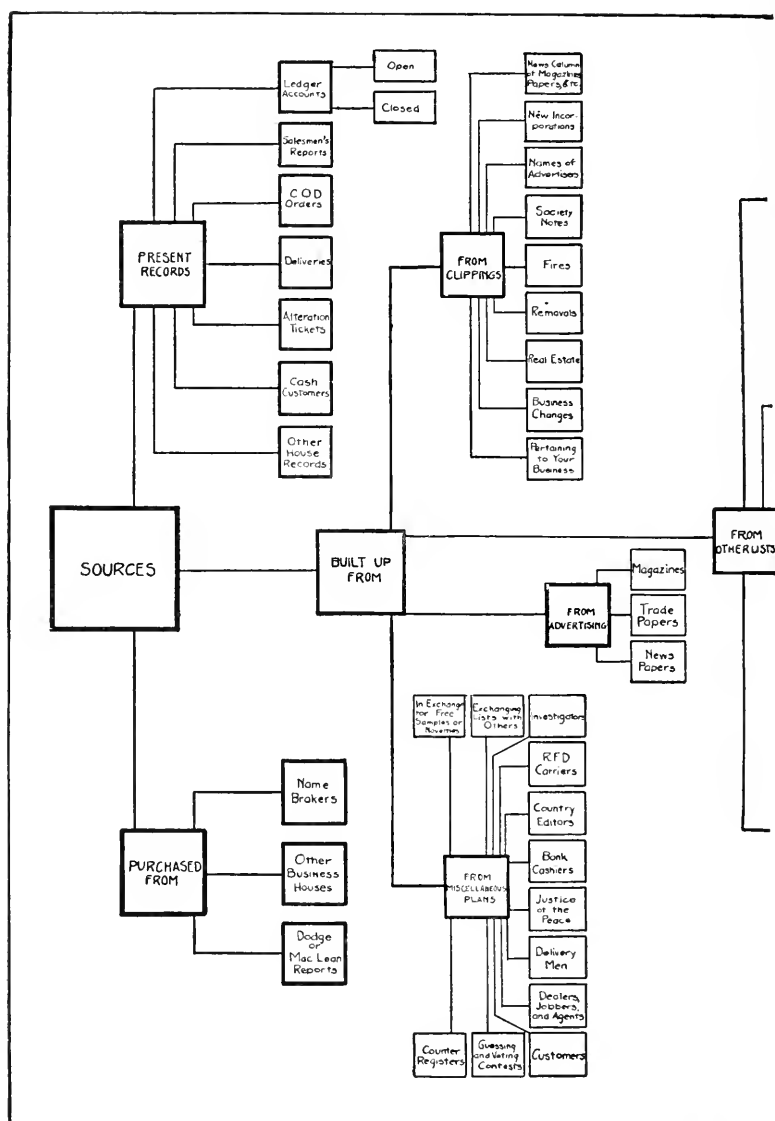
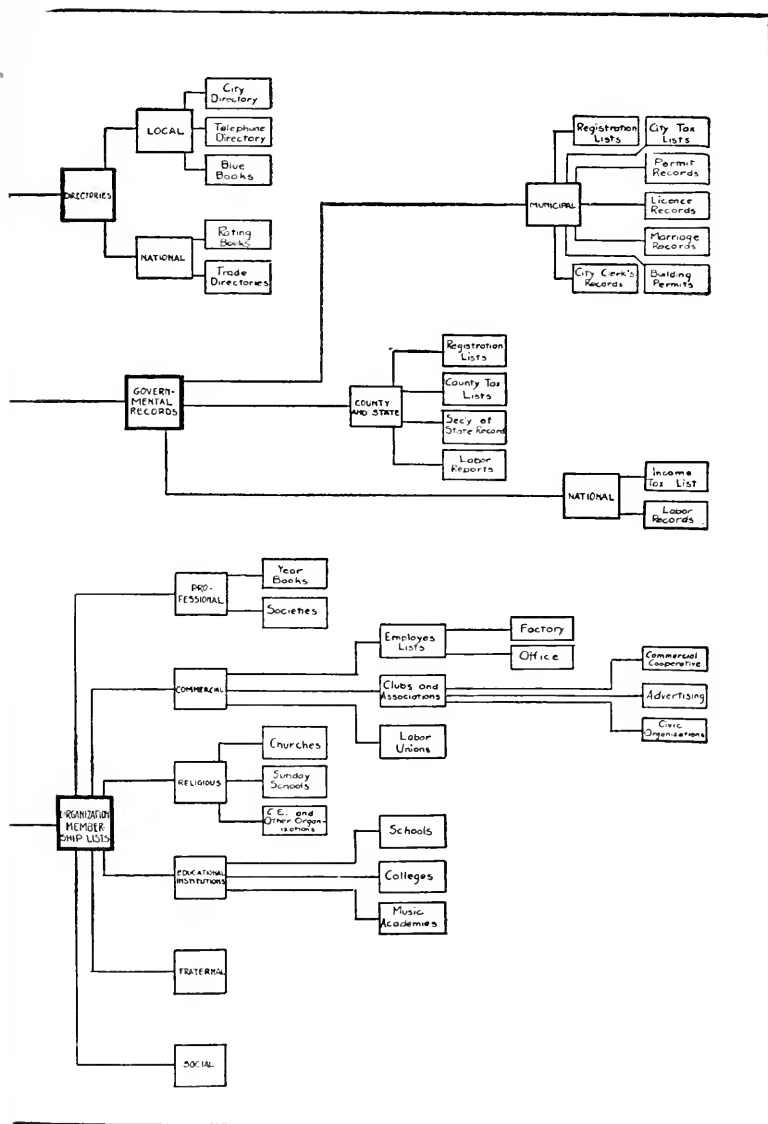


Figure 65. Mailing
By carefully compiling a list of names from the various sources here shown,



List Sources

a very complete mailing list is obtained. This should be done systematically.

up system is kept intact and the different steps can be taken without executive supervision.

By the use of such a series of letters, one of which is as illustrated in the chart shown in Figure 64, a large volume of mail can be handled with a minimum of supervision. Some of the series, if carried through their entire length, require fourteen months for their completion, but, of course, any one of the series is automatically stopped as soon as a satisfactory reply is received.

Sources of Names for Mailing List

The compiling of lists of prospective customers and their development into purchasers has a large place in merchandising today. This work has been perfected with greater care and thought than perhaps any of the other features mentioned as forming a part of the work of the promotion department—largely because of the demands of mail-order business. If as complete a list as possible is to be gathered a definite plan of selecting names should be adopted, and a thorough analysis made of the sources from whence they may be obtained, either individually or as complete lists. Obvious sources for securing names readily suggest themselves, but unless thought is given to the matter many “self-evident” sources will escape notice. As regards lists of names it is not always an easy matter to secure those which are reliable, nor is it always satisfactory to use complete lists purchased from concerns making a specialty of compiling them for all and every purpose. While the initial outlay may be comparatively small, an inaccurate mailing list is dear at any price. Old-established mail-order houses count their mailing lists among their most valuable assets.

The preceding chart (Figure 65) compiled by a leading authority gives an exhaustive list of sources for mailing lists.

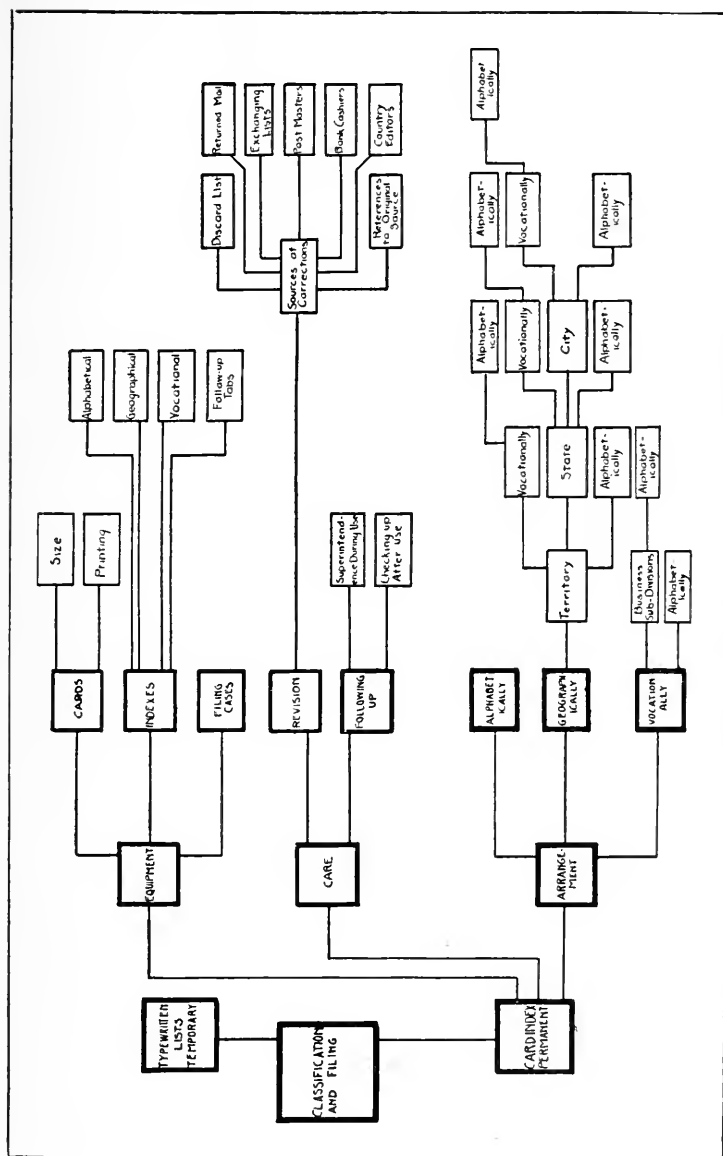


Figure 66. Mailing List Classification and Filing

This chart illustrates the method of classifying names, filing them, and eliminating duplicates.

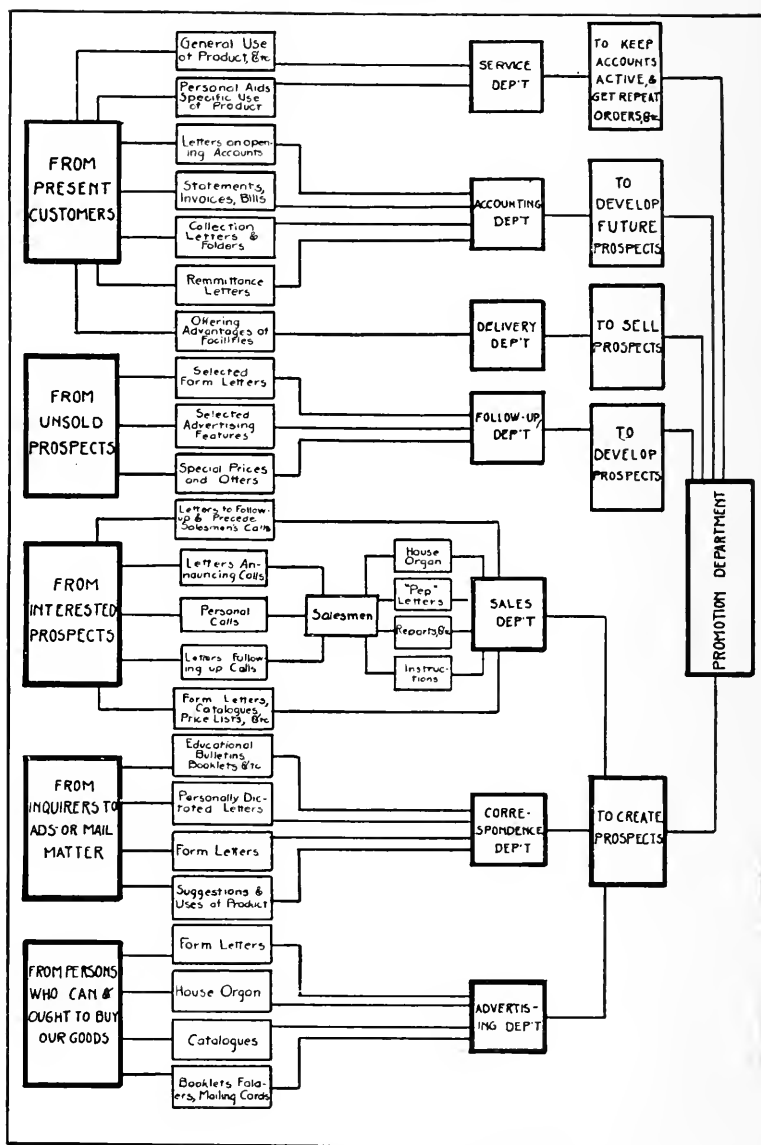


Figure 67. Correspondence and Follow-Up Sections of Promotion Department
Showing the co-operative development of the follow-up system.

The handling of the names as they are gathered will be greatly facilitated if a complete classification filing scheme is outlined. Figure 66 will serve as a guide.

The sales promotion plan is based on the idea that a single order does not always signify a customer. It is the resale that brings the steady profits. While as yet those services which create good-will have not been gathered into one department and under the control of one head, the spirit of the scheme is permeating all business organizations.

Co-ordination Through the Mail

While a detailed outline of the work of the promotion department has been given, particular attention needs to be directed to the correspondence and follow-up sections. The preceding chart (Figure 67) will give a general idea of the co-operative work that may be done.

The diagram is easily interpreted and the co-operative elements thrown into relief by beginning with the main types of customer relationships, relationships growing up between the concern and

1. Those who can and ought to buy its product.
2. Those who have replied to some ad or mail matter.
3. Those who have shown some inclination to buy.
4. Unsold prospects.
5. Present customers.

The second step is to follow the lines of contact by which the public interest has been attracted to the house, and then trace the procedure through the various departments to the central promotion department which has analyzed the various purposes of these departments and developed the correspondence and other service features by which a consistent policy and a constant pressure is directed to the giving of sales service both inside and outside.

CHAPTER XXVII

THE ADVERTISING DEPARTMENT AND ITS WORK

Elasticity of Advertising Department

Of all departments of a business none is more elastic and more readily expanded or contracted than the advertising department. This is due to the nature of its work. An advertising department exists to create sales by means of the written word, and in this creative work a concern may spend just as much or as little as it pleases. A million dollars a year or more may be spent by one firm in pushing the sale of a patent pill which can be produced and packed in almost any quantity with the aid of a few machines and half a dozen operators. Another firm may spend many millions in producing ordnance or ships and carry on a large and lucrative business without any advertising at all.

While it is possible to assert that for some businesses advertising is unnecessary, it is no longer possible to say with any truth that for some businesses all advertising is unprofitable. Every business can advertise itself in some way at a profit. The function of the advertising department is to explore all avenues of publicity with the object of finding out those which can be used most profitably and of spending to the best advantage the sum allotted to publicity work, i.e., the appropriation.

It is in this matter of appropriation that the advertising department differs from the other divisions of the business. The credit, accounting, shipping, and other departments require a certain number of employees to handle a steady amount of work done in a regular routine way. Their expansion or contraction depends wholly upon the volume of sales. The

expansion of the sales department is limited by the difficulty first of finding and training the right kind of salesmen, then of ferreting out the potential customer, and finally of extracting an order from him at a profit when the expense of the salesman's time is considered. But the advertising department is bound by no such limitations. It can blaze the trail for the whole business, so to speak. Given a product which can be profitably advertised in many different ways, the advertising appropriation need be limited only by the resources of the business and the discretion of its management.

Organization of Department

The organization of the advertising department, so far as concerns its personnel, depends upon what the department has to do, and that depends upon the plan of spending the appropriation and the amount available for spending. The appropriation cannot be determined without taking into account the salaries and office expenses involved in carrying out the plan of campaign; this in its turn depends upon how much advertising the appropriation allows. Thus the considerations run in a circle.

The problems involved in organization may perhaps be simplified by illustration. Assume that a certain concern handles a household utility such as soap or baking powder, and that the distribution, by years of spade work on the part of salesmen, is highly developed. The main problem of the advertising department is to keep the name of the product favorably before the public and for this purpose an appropriation of \$1,000,000 or more is made yearly.

The most economical method of appealing to a whole nation is through the pages of its national mediums, and this kind of advertising work is invariably handled by an advertising agency. The agency engages the services of a number of experts who are trained in the difficult art of writing and

illustrating advertisements and placing them in mediums where they will produce the best results. The work done by the agency may consume nine-tenths of the appropriation. Consequently, the advertising department of a big concern doing a large amount of business may assume very small proportions. It may even be run by one man with the help of a stenographer or two. Practically most of his work will consist of consultations with the agents—considering suggestions for advertisements and giving his O K to copy, illustrations, and the detail of the plan of campaign. If in addition to the national advertising, promotion work is done among dealers, this may be handled by the advertising manager, as under these circumstances the creation of a special department in charge of promotion work would be unnecessary.

Assume that another concern handles a specialty, such as an office device. To sell this article it is necessary to interest the consumer in its time- or labor-saving features and this requires a campaign of education. The demand for such a product is chiefly in the commercial and manufacturing centers, so that national publicity would involve much waste. The better plan might be to use general publicity only in selected territories through the medium of local newspapers. This general publicity, however, would be merely for the purpose of awakening interest and discovering likely customers. The prospects would then require following up with form letters, circulars, booklets, and other printed matter. In the first case the advertising appropriation is spent in large sums in broadcast fashion; in the second case it is spent piecemeal and the results of even small expenditures are carefully tested. Though the appropriation in the second case might be only \$100,000, its organization might be ten times as large as the concern spending a million dollars.

The Work of the Department

Thus the work of an advertising department depends upon the nature of the product and upon how much there is to spend or can be spent in profitable publicity. Reduced to a more definite statement the complete work of a department organized to carry on a big general campaign would consist of the following steps:

1. Planning the campaign.
2. Laying out the appropriation.
3. Co-operating with other departments.
4. Producing the advertising.
5. Checking its production or delivery.
6. Keeping records of its cost and results.
7. Keeping stock of advertising supplies.
8. Carrying on its correspondence and follow-up work.

The first two duties cannot be adequately discussed within the space of a single chapter, as they will vary with the resources and policy of each business, with the nature of the product, and with the strength of competition. But as every plan of campaign involves some or all of the remaining factors, and as the nature of the work involved is more or less of a routine character, each will be taken up in turn.

Co-operation with Other Departments

Viewed from one angle, the work of the advertising department is a self-centered activity which can be carried on more or less apart from the regular routine of a business. In some cases, as previously explained, the advertising is largely handled by an outside agency. In consequence, there is always the danger that the advertising work will suffer from too much isolation and that the advertising man will play a more or less lone hand immersed in his "creative work." To counteract this tendency he should attend all executive conferences

when plans and progress are discussed, so as to be able to shape his advertising message to conform with the spirit and policy of the house. At the same time he should strive to create a true appreciation among his colleagues of the work and needs of the advertising department, and to make them realize that any help given to him will benefit all branches of the business. This mutual understanding will stand the department in good stead when the advertising appropriation is being considered.

To get down to more specific details, the work of the advertising department should always be closely dovetailed into that of the sales, correspondence, and mailing departments. Advertising is most effective when supported by the efforts of the salesmen in the field and vice versa. Salesmen should be provided with copies of all advertising literature issued, either for their personal use in helping to win over a prospect, or as evidence to dealers of the demand the house is striving to create for its product. When an advertised product reaches the consumer through the retailer, the customary practice is to provide each salesman with a loose-leaf album, to the pages of which are attached specimens of all current advertising. Introduced with a suitable sales talk, such evidence is a powerful inducement for the dealer to "stock up" to the limit required to fill the demand created by the advertising.

There are many other possible points of contact between the sales and the advertising departments, but as these depend upon the plan of campaign they will readily suggest themselves when the plan is worked out. There should also be close co-operation and mutual understanding between the advertising and correspondence and mailing departments.

Production of the Advertising

The advertising may be done in one or more of a hundred different ways. Announcements may appear in newspapers

or magazines of a general, technical, class, or trade character. Display publicity may be effected by means of store windows, car-cards, bill-boards, and painted signs and walls. Mail and follow-up work may be carried on by means of form letters, circulars, booklets, folders, and catalogues. Samples of the commodity or advertising novelties may be distributed from house to house or store to store. This last method belongs more to the sphere of sales promotion than of advertising proper and so will not be taken up here. The other methods involve the production of an advertisement in some form and this work may be divided into the four distinct phases of:

1. Probing for ideas.
2. Designing the advertisement.
3. Writing copy for the advertisement.
4. Originating illustrations or procuring photographs.

As the above work is technical or creative in its character and its discussion involves the consideration of matters outside the office routine, it will not be discussed here. One point, however, in connection with probing for ideas needs brief consideration.

System for the Record of Ideas

Every advertising department should keep an "idea" file, in which any possible suggestion for a future advertisement is stored away until the time for its use is ripe or the germ of the idea has developed into a practicable plan. Ideas have a way of appearing at any time, and if they are not seized on the wing and imprisoned within the file where they can be found when wanted, the inspiration of today is forgotten in the rush of tomorrow's work. Therefore a system should be organized whereby the ideas of individuals whose duty it is to write the advertisements may be preserved and classified. The combination of: (1) an ever present pocket pad or note-

book, (2) a memory tickler file, and (3) a carefully classified idea and data file, constitute as nearly adequate a system as can be devised for storing the raw material out of which much of the creative work of the department is evolved.

Record of Mediums

When the advertising plan includes the use of newspapers or magazines, it is necessary to choose the mediums which show a favorable ratio between probable results for the product handled and the rate charged for space. For this purpose complete information should be compiled for every publication which may be used. A common way of keeping this information conveniently at hand and always up to date is to use a large envelope folder, on the outside of which the rate card applying to the particular publication can be posted. Inside the folder should be placed all papers, statements, information affecting the publication, statements regarding circulation, the territory covered, the number of subscribers, and any other information which is useful as a guide in choosing the mediums.

The usual method of filing these folders is alphabetically according to state and city. The publications issued in each city may be arranged alphabetically in the order of :

1. Dailies
 2. Semiweeklies
 3. Weeklies
 4. Semimonthlies
 5. Monthlies
 6. Quarterlies
- Etc., etc.

Another method used by a number of advertising departments is to enter the information on cards, filed alphabetically according to the name of the publication. This method

is suitable for many of the smaller advertising departments and also for some of the larger. It depends upon the number of the publications used, the importance of local advertising, the scope of the information required, etc.

Figure 68 illustrates a card index of advertising rates with the information sought by one advertising department.

CARD INDEX RECORD OF RATES, ETC.	
Publication	
Publisher	Address
Page Rate	Line Rate
Space Disc.	Cash Disc.
Height Page	Lines to Page
No. Cols.	Col. Width
Half-tone Screen	Use Matrices
Claimed Circulation	Class
Territory Covered	

Figure 68. Card Index Record of Advertising Rates

The details of rates charged by various publications are noted on these cards, and the cards filed alphabetically.

The principal object in keeping records of mediums is the elimination of the unprofitable ones. In the case of advertising of the "good-will" or consumer kind, results can only be gaged in a general way. The mediums chosen are only those that careful consideration determines are best able to deliver the message. If the advertising, however, is not of the general consumer type, but solicits an inquiry, then it becomes possible to check up more accurately the pulling power of each medium by the use of a system of keying—that is, of

apportioning inquiries or sales, as they come in, to the right publication.

In many advertising departments it is necessary to have an efficient system of checking advertising returns and calculating the profits resulting from each insertion in every publication used. In order to do this it is obvious that the keying must be fairly accurate. No system has as yet been devised which is absolutely perfect; it is possible, however, at least to show tendencies with some degree of certainty.

A department store, for example, could not with any accuracy tell the returns of an advertisement inserted for any particular date. It could, however, get an estimate of the cash returns taken in above the normal sales of the article advertised. Another concern which runs advertisements only in one publication in all probability could apportion the returns with 99 per cent accuracy.

Methods of Keying

Keying is managed usually by altering slightly the directions for making the inquiry, for each periodical used. This may be done as follows:

1. The use of departments, as Department A, Department B.
2. Changing street numbers, room numbers, or post-office box numbers.
3. Using letters N. S. E. and W.
4. Using avenues for streets or vice versa.
5. Designating the advertising matter called for as Bulletin A, B, or C.
6. The use of a coupon bearing a notation, such as S. E. P. 10, which could be interpreted to mean *Saturday Evening Post*, the tenth month.

Some concerns send postal cards to unkeyed inquiries re-

	DATE OF ISSUE	KEY NO.	SIZE OF AD.	COST OF AD.	NO. OF INQUIRIES	COST PER INQUIRY	GROSS SALES	COST PER \$1 SALE	REMARKS
6	Sat. Evening Post Dec. 7 " 14 " 21 " 28	Dept. B " O "	1/2 page " 1/2 "	\$2,000 2,000 "	12,000 8,571 "	27c. 23c. "	\$27,000 17,997 "	71 3/4 c. 71 3/4 c. "	Least cost per inquiry and greatest number of inquiries. Good for this medium Average results
7	Ajax Weekly.... " 7 " 14 " 21 " 28	E " P "	" 1/4 1/4 "	400 400 400 "	1,333 570 "	30c. 70c. "	2,790 1,368 "	15c. 30c. "	

Figure 69. Method of Checking Results in a Mail-Order House

RATIO OF INQUIRIES TO CIRCULATION			
RATIO OF ORDERS TO INQUIRIES			
PROCEEDS PER ORDER			
COST PER ORDER			
ORDERS			
PROCEEDS PER INQUIRY			
COST PER INQUIRY			
INQUIRIES			
RETURNS PER DOL. SPENT			
CASH RETURNS			
COST OF ADVERTISING			
CLAIMED CIRCULATION			
JAN.—FEB.—MARCH 1918			

questing information as to what advertisement influenced the inquiry.

Other concerns follow the practice of crediting each publication with the percentage of unkeyed replies equivalent to the properly keyed inquiries. For example, if an advertisement in the *Saturday Evening Post* brings replies which can be properly credited to the amount of 40 per cent to that publication, then the same proportion of the number of the unkeyed replies should be allotted to it.

Figure 69 illustrates the method followed by a mail-order house in checking and figuring results of advertisements in weeklies. The form shows the cost per inquiry, the number of inquiries, and the cost per \$1 sale. This information is vital. Whenever the cost of advertising in a given medium exceeds a certain ratio the publication is dropped. To arrive

Name _____			Case _____		
Address _____					

1ST SERIES	2ND SERIES	3RD SERIES	RESULTS		
			Style	Amount	Date
Remarks _____					

Medium _____					

Figure 71. Inquiry Follow-up Card

When an order is received this card is removed from inquiry file and placed in order file. Both files are kept alphabetically.

at any worth-while conclusion by the method here followed presupposes a decidedly accurate system of keying by which each inquiry and order may be connected with a definite advertisement.

Another method is that employed by a manufacturer of dress forms. The object of the data required (Figure 70) is to give the cost per order and to check the effectiveness of the follow-up (Figure 71). When the inquiry is received the first series of circular matter is sent out and is followed, if need be, by the second and third series. If correspondence ensues the "case" number is inserted. If this correspondence results in an order, the follow-up card is removed from the inquiry file and inscribed with the record of the order and placed in the order file. Both inquiry and order files are kept alphabetically. The data for the quarterly analysis are secured from both of them (Figure 70).

Records by Region, Season, etc.

In keeping record by sections of the country, the ratio between expenditures and sales, compared with the ratio in other localities, will form the basis for investigation. What this is will depend upon the nature of the business.

In some lines it is very important to know the season best adaptable to push sales of individual products and for specific purposes. For example, advertising jars for canning purposes involves knowing: (1) what fruit is canned in a given locality, and (2) when the canning season begins in that locality. It would obviously be foolish to advertise jars for canning purposes two or three months after the season is over.

Another desirable record is a form summarizing the chief items and distributing figures according to principal classifications. This is valuable in giving a bird's-eye view of results achieved. The form may be so designed as to give the figures on both a monthly and an annual basis.

Record of Advertising Expenditure and Distribution

The following form (Figure 72) is a good illustration of what one firm requires in the matter of keeping track of the expenditure of an appropriation. The first column gives the date ordered, the second column the date of the order. These dates would, of course, be similar except in cases where the requisition is sent to the purchasing department. The third column gives the order number, the fourth column the person or firm from whom the item is ordered, the fifth column the items ordered, the sixth column the approximate cost.

This approximate cost column is perhaps the most important of all. Here should be listed in pencil the approximate cost of every expenditure just as soon as the purchase order is issued. At the beginning of the year there are certain fixed charges such as salaries, postage (not including postage used on special direct mail drives), miscellaneous expenses, etc., and the approximate cost of these should be entered in the

RECORD OF ADVERTISING EXPEN				
DATE ORDERED	DATE OF ORDER	ORDER NO.	ORDERED FROM	ITEMS ORDERED
				Amounts Forward
				Totals Forward

Figure 72. Monthly Record of Adver-

A loose-leaf record kept in folders. Distribution is made

In the event of getting out a new booklet for which the printing estimate is \$200, this item is entered in the approximate cost column in pencil. If during the month of January the schedule of space to be bought shows that \$15,000 is to be used for advertising in the *Saturday Evening Post* and \$10,000 used for space in another publication, these amounts are listed in the approximate cost column. Then as invoices come in month by month they are entered in the month during which they are paid. This will show that 25 per cent has already been spent of the appropriation of \$100,000, although the actual paying of invoices at the end of the first month might only show \$2,000. If invoices ordered in January are received in February and paid for during that month, the

[illegible]

according to publications used or according to articles sold.

amount of these is entered as being paid in February, while the amount of the approximate cost entered in January in pencil is put in red ink in the January account. This red ink entry is for the purpose of showing that the matter has been taken care of, that the invoice has been received, and that the approximate cost figure has been corrected. If an item is estimated at \$200 and later the invoice comes in showing the actual cost to be \$250, the \$200 entered in pencil in January is changed to \$200 in red ink; in February, the month in which the invoice is paid, the entire amount is re-entered in the approximate cost column, but in this case only \$50 is placed there, and in the actual cost column, as per invoice, \$250. In this manner the difference is taken care of. If the invoice is paid the same month, the item is simply corrected in red ink. If in a different month and the estimate is correct, the approximate cost column is left blank. By keeping the approximate cost and the actual cost columns corrected as fast as the invoices come in, these columns will balance at the end of the year, although for a good many months in the year the approximate cost column has greatly overbalanced.

A good way of checking up the actual cost column is by having the accounting department furnish a statement each month. The two records can then be compared and errors corrected.

To hold these loose-leaf forms a special folder should be used, large enough to contain a year's supply. The forms should be kept by months. At the end of the year the sheets may be transferred to a permanent file. In this way a ready reference will also be handy showing month by month for the preceding year the approximate and the actual cost.

The ninth column shows the date on which the invoice was approved by the advertising manager.

The distribution columns will, of course, vary with every firm. Sometimes the description will be made according to

classes of publications used, sometimes according to the articles sold.

Checking Bills

The bills considered by an advertising department fall naturally into two classes: those for supplies, in which case the purchasing department procedure is followed; and those for space.

In the case of bills for space, there is one peculiar difficulty encountered, namely, that they must generally be paid before there is an opportunity of checking every item. In many cases the bill must be paid before the advertisement appears, or the cash discount period is generally so short that no proper checking can be done. The usual procedure is to check as many items as possible, pay the bill, and institute some system whereby the incompletely checked bills revert back to the advertising department for further checking after the invoice has been paid.

A special bill stamp (Figure 73) should be used in con-

Order No.....
Insertion.....
Composition.....
Position.....
Presswork
Key Number
Amount of Space.....
Circulation.....
Circulation on Time.....
Charged to
Approved

Figure 73. Rubber Stamp for Advertising Invoices

These items are filled in, as far as available information permits, at time invoice is received, and are completed after invoice is paid.

nection with invoices for space because of the unusual features to be considered.

The routine of checking newspaper advertising may be summarized by presenting the rules of one concern which are as follows:

1. No entries shall be made in the record book except from orders issued by this office.
2. No bills shall be passed without checking in total as to number of advertisements and amount of space in comparison with our orders.
3. Other information must be billed in the book covering such points as:
 - Source
 - Frequency
 - Date first issue
 - Date last issue
 - Period
 - Rate
 - Approximate total space
 - Estimated cost of space
 - Kind of electros
4. When bills are received they must be checked and entry made opposite the word "Entry."
5. The checking must be done first from the total checking sheets accompanying the bill to see that number of advertisements, amount of space, dates, etc., correspond with order.
6. Additions for total amount of space must then be checked up and compared with the amount on the bill.
7. Then the rate charged for on the bill must be checked and the extension at the proper rate must be checked.
8. Where a bill only accounts for part of the order, room must be left for notation of following bills which will complete the order.
9. The information as to the date of last issue, approximate total space, estimated cost, etc., must either be figured by ourselves or information secured from our agents at the time the order is issued.

10. When bill is O K'd the amount that we pay for space must be entered under the column headed "Amount Billed For."
11. When the bill for electros comes in, it too must be entered under the column "Cost of Electros."
12. When special bills for composition of names, cost of slugs, etc., come in, they must be checked and filled in under column headed "Cost Special Composition."
13. When bill for express charges on electros comes in, it must be entered under the column headed "Express Charges on Electros."
14. Each month the total cost must be figured up not later than the 20th of the month for the preceding month.

The Budget

The budget system is perhaps the best means of checking up and seeing that plans are followed. This system is based upon the use of forms so designed as to control the spending of the appropriation in accordance with the plans. When the budget has been made out it becomes the master sheet and all costs must be checked against it.

In the case of a new department and sometimes in reorganization, equipment must often be obtained such as multi-graphs, addressing machines, filing cabinets, and folding machines. Some of this work is generally taken care of by the purchasing department, as for example, obtaining quotations for all printed matter and necessary equipment. Matters like contracting for space and ordering engravings and cuts are generally left to the advertising department.

Adjusting the Department Organization to Carry Out the Work

The final step in the work of planning a campaign is the adjustment or readjustment of the department organization to carry out the special plans. Certain extensive campaigns may

involve changes so elaborate as to amount almost to building a new organization. The office manager should make these sweeping changes only for the best of reasons, since they frequently affect the number and character of employees in the stenographic, mailing, and other service departments of the office.

In making such adjustment for a particular campaign, the adjusting manager must use some method to determine the amount of the work needed to carry the plans through and how many and what types of individuals are needed to perform it. One of the most systematic ways of analyzing the standard needs of the advertising department is as follows:

1. Use a separate card for each operation, taking into consideration:
 - (a) Amount and detail.
 - (b) Frequency of its occurrence.
 - (c) Time it takes to do it.
2. Classify these cards according to type of work:
 - (a) Executive.
 - (b) Creative.
 - (c) Clerical.
3. Combine these operations to fit the day's work of given individuals, considering:
 - (a) Talent required.
 - (b) Avoidance of duplication.
 - (c) Similarity of operations.
 - (d) The easy flow of the work throughout the department.

With the basic information at hand which such an investigation will furnish, standard classification can be compiled by which each job can be described, and as changes arise, due to new conditions of a special campaign, the description of the job can be adjusted.

As will be noticed, the first step gives approximately the total amount of work to be performed. The second step gives the total amount of work by classes. This will show how many clerks or art men to hire, what their qualifications should be, etc. By getting this down in black and white in the beginning, a great deal of experimental work will be eliminated. The third step depends upon the first and the second to a great extent but is also affected by the human equation. The amount of the clerical work to be done will determine the degree of specialization. Filing may take up the whole of one or more individual's time in some advertising departments but in others it may be a part of a stenographer's fifteen or twenty duties. The executive and creative work may be only sufficient to keep one man busy, yet there are very few men who are good at both. The man who is worth \$5,000 a year for his creative work may not be worth \$10 a week as an executive.

Assignment of Duties

After making a provisional assignment of duties to be performed by the separate individuals in the department, the whole arrangement should be continually improved as flaws begin to show themselves. As soon as evidences of stability show themselves in the department, the manager should check up his original regulations by reports from the employees themselves. Each individual should be asked to place on a card the routine of every operation that enters into his list of duties. Emphasis must be laid on the fact that what is put down must be the best way, so far as he understands it, of performing the operation in question. Undoubtedly the mode of doing the operation can be improved on from time to time. The important thing to remember is that an improvement in method should not be allowed to slip away and require to be discovered again, but should serve as a basis for the next forward step. This practice, moreover, enables the management

to fill more readily positions that are unexpectedly vacated. All that is necessary is to give the appropriate cards to the new employee. The little work entailed will more than pay for itself in the shortened time needed to train new employees.

Drawing Up the Duty Card

When records of this kind have been compiled throughout the whole department, they may be put into the form of individual "duty" cards which would appear something like this:

DUTIES

R. P. BROWN

Railroad Bulletin—Sign Boards

Leases:

- Renewing vouchers for filing, etc., following up.
- Special correspondence on.

Main Records:

- Weekly, monthly, etc., cost records of painters.
- Checking items in books.
- Filing bulletin reports, leases, etc.

Miscellaneous Records:

- Checking of lists to see that all boards are done, keeping locations up-to-date, lost boards, moved boards, new property owners, etc., etc.
- Supplying sign-men with material and keeping track of sign-men's stock.

Period Advertising:

- Checking advertisements that come in, filing in scrap book, etc.
- Care of magazine files. Distributing of newspaper and magazine mail.
- Care of newspaper circulation files.
- Entering magazine orders.

Miscellaneous:

- Scrap-books, filing miscellaneous clippings and record of clippings received.
- Attention to tickler.
- Care of engravings and electros.
- Care of proofs.

Stock-keeping

It is most important to maintain a systematic and complete record of the materials of all sorts which are used in connection with the work of the advertising department. Advertising offices too often neglect an adequate stock record of advertising material such as folders, form letters, stationery, signs, window display cards, etc.

Many advertising departments keep their supplies in different places—circulars for instance are often stored, as a matter of convenience, by the printer. Also it is not always realized that when this material is exposed to the action of the air for any length of time it turns yellow and becomes absolutely worthless. The modern way of taking care of the stock is to keep it in regularly numbered bins of steel or wood protected from air and dust. A card index should be kept which will show at all times, regarding any article, as follows:

1. Where the supplies may be found, whether in the hands of the printer or elsewhere.
2. The amounts that have been ordered.
3. The amount delivered.
4. The balance on hand.

By designating on each card a minimum amount, additional supplies may be ordered automatically when needed.

Filing

Parallel with the matter of stock-keeping is that of filing, which requires very careful attention in connection with the advertising work. A great variety of articles, varying widely in nature and also in size and shape, are handled in an advertising department and must be available at a moment's notice; such are clippings, suggestive ads, catalogues, booklets, competitors' literature, photographs, engravings, electros, drawings, and cuts. Clippings, etc., may be filed alphabetically

by subject or article covered. Catalogues, booklets, and competitors' literature are sometimes taken care of by the use of a vertical file, each catalogue or booklet numbered and filed in rotation with a card index alphabetically arranged.

Engravings, electros, drawings, cuts, etc., are perhaps best filed separately in special cabinets designed to hold the various shapes.

Clippings of permanent value should be mounted upon manila sheets (the thickness of the paper being the size of the standard letter-head). The source and date of publication should be carefully marked. When handled in conjunction with information and data files, the clipping sheets should be filed under the subject, with proper cross-references.

Magazine articles that do not exceed a page in length can be clipped and mounted in the same manner as newspaper clippings. When an article runs several pages it can be made into an individual pamphlet by stapling the pages between two clipping sheets.

Clippings of temporary value can be filed in the folder without mounting, or mounted on light-weight paper of a different color. Another method of filing clippings without mounting on sheets, is by the use of folders 5 x 8 inches, filed in card index trays or vertical file drawers of the same size.

CHAPTER XXVIII

THE ORGANIZATION OF THE ACCOUNTING DEPARTMENT

The Accounting Department and the Office Manager

There are several good reasons why the office manager should know the principles of accounts and understand the reason for the adoption of particular accounting methods and systems in his business. For one thing every business is run to make profits, and profits largely depend upon economical and efficient administration, i.e., the keeping of expenditures well within the limits of income. Expenditures can only be controlled by means of an account system which analyzes every detail of the business. Unless the office manager understands accounts and the purpose and scope of this analysis he works blindly and ineffectively in his attempt to get full administrative value out of expenditures. With sufficient analytical data before him he can keep a close watch over expenditures day by day.

Then again, because of the importance of the accounting department in the general administrative scheme, its co-operation is necessary to furnish the office manager with the reports and comparative statistics which he requires to control and guide the work of all office departments. The necessary information already exists in the accounting records, and it is only necessary to "dig it out" and present it in a form to enable the office manager to check up the performance of the various functions for which he is responsible. Finally a knowledge of accountancy will enable the office manager to organize the work of the accounting department so as best to serve the plans and policies of the business.

Relation of Accounting to Office Routine

Much of the general office work is directly "tied up" with the routine of the accounting department. For instance, in many businesses duplicate copies (in whole or in part) of the invoice are made out in the billing department for use in the shipping and credit departments and for entry on the sales record and in the accounts receivable (the customers ledger). The work of the accounting department, so far as concerns the ledger entries, is still more closely related to that of the credit department. For example, the clerical work of posting sales and incoming cash should be kept up to the minute, as much in the interest of the credit and collection department as in that of the accounting division. An appreciation of the importance of the link between the two departments is necessary if co-operation is to be obtained and if needless duplication of work is to be avoided. Finally, many of the clerical employees in the modern office are doing work which directly or indirectly affects the accounting records. An office manager unfamiliar with the relation of the work of these employees to the whole scheme of office administration, lacks that grasp of details which is essential if important office activities are to be properly supervised and controlled.

The Development of the Accounting Department

The work of the accounting department may be divided into two distinct phases: (1) the recording of the financial transactions of the business, and (2) the preparation of comparative statements and reports for administrative purposes. For generations the first function was considered of major importance, but modern business development has changed the direction of the emphasis. The statistical work of the department is today of even more importance as an administrative guide than is the bookkeeping, which discloses the amount of profit or loss made during a given period and the financial

status of the business at the end of this period. A business organization which does not pilot its course by means of the chart of comparative statements made out not yearly, or half yearly, but at least monthly and in some cases even weekly and daily, is running a reckless course.

This change in the point of view of an accounting department's functions has created the profession of accountancy. The old bookkeeper has disappeared. He has either been metamorphosed into a computing machine, both literally and figuratively, or he has developed into a compiler of comparative statements and constructive accounting. In machines we expect accuracy and speed; in a statistician we look for judgment. Statistics are valuable only as they are collected and classified in the light of a definite purpose.

The Personnel of the Accounting Department

The organization of the accounting department naturally varies with the size and nature of the business. The financial accounts of a small manufacturing concern making a single product sold to a limited number of customers might be easily handled by three or four clerks with a head bookkeeper in charge; its cost accounts and records could be compiled by a cost clerk who is thoroughly conversant with this branch of accounting, and who, if necessary, would be assisted by two or three girls. The accounts of a large mail-order or jobbing house with many thousands of customers, or those of a big manufacturing concern turning out a varied line of products, would be so numerous and the system so complex that it would be necessary to split up the work into sections, each in charge of a minor executive, and all under the supervision of the head accountant or office manager. The routine work and duties of these sections would, however, be little more complex than the accounting work of the small business. In fact in the large concern the routine would, if anything,

be simpler than in the small organization because of the increased opportunity for specialization. The clerk in charge of a single section of the accounts receivable ledger obviously holds down a more simple job than a bookkeeper in charge of several books of the small concern.

Example of Accounting Organization

It is superfluous to say that the functions and duties of the personnel of every business are based on the same principles of procedure—whether the office force consists of half a dozen or of many thousand employees. Yet it seems necessary to mention this fact when describing the accounting work of a large concern for the purposes of illustration, for fear that the manager of a small office may not recognize the value of an illustration taken from a field which is apparently so different from his own.

The accounting department to be described is that of a large New England manufacturing concern employing 16,000 men and doing a domestic and foreign business of many million dollars a year. The officials of the company have just spent several thousand dollars on the reorganization of its accounting system and consequently they consider it modern and up-to-date, but of course possessing features—as all systems do—peculiar to its special line of business. .

Duties of Officials

The system, which is divided into the two general departments of commercial and cost, again subdivided into sections, is under the control of a comptroller, a chief accountant, and an auditor. Each of these officials has certain well-defined duties which, briefly described, are as follows.

The comptroller has supervision over the accounts and finance. It is his duty to determine the method of handling the financial accounts and of preparing statements for the

board of directors. All reports required by law, and the numerous statements for the information of the officers and directors, such as an itemized statement of undivided profits, an itemized statement of monthly earnings, detailed reports of expenses, and a complete cost analysis of some departments, etc., are compiled and presented under his direction.

The chief accountant has direct charge of accounts and accounting methods. He decides questions of development work and ways of handling accounts. To him also falls the duty of supervising the employees of the department. All questions regarding methods of entry, etc., are referred to him, and any suggested change in the systems employed or forms used must receive his approval.

The auditor has general charge of accounting inspection. This work calls for periodical inspection of activities ranging from the daily checking of cash and the proving of ledger postings, to monthly, quarterly, and yearly audits. In detail the functions of the auditing department, which contains ten clerks, is described in the accounting manual as follows:

1. Check incoming invoices
2. Audit all pay-rolls
3. Audit and pass on all payments made
4. Audit balance of shares
5. Audit accounts receivable
6. Audit general books
7. Audit reconciled bank accounts
8. Audit cash
9. Audit cost
10. Check and examine all securities by physical inspection
11. Audit vouchers payable
12. Advise and report to heads of departments (controller, engineer, treasurer, etc.)

Duties of Section Heads

The organization, as already stated, is separated into two divisions—commercial and cost—and these in turn are divided into sections. The organization of a cost department is usually left to a competent cost accountant and so, for purposes of illustration, we will choose the commercial division. This division consists of various sections in charge of the general ledger, invoicing, accounts receivable, cash records, and vouchers payable. At the head of each section is a supervising clerk whose duty it is to see that the bookkeeping work connected with his particular kind of record is properly carried out.

General Ledger Section

The general ledger section is in charge of a general bookkeeper who, with two assistants, keeps control of all subsidiary accounts and compiles all financial statements. The detail analysis of the different groups of accounts, such as administration, selling, income, and so on, must be thoroughly mastered by the head of this section if he is to carry out the instructions of the comptroller and the business policies of the company. The general duties of the section are to post the general ledger and to make out monthly financial statements, a periodical balance sheet, and a profit and loss statement. Another duty of this section is to keep a record of the assets of the company.

Invoice Section

The invoice section, from a clerical point of view, holds a leading position in the company's accounting organization. A study of the chart presented in Figure 74 will show its position in the accounting division, as well as its relationship to the flow of clerical work connected with the filling of an order. In studying the chart the reader should start at the

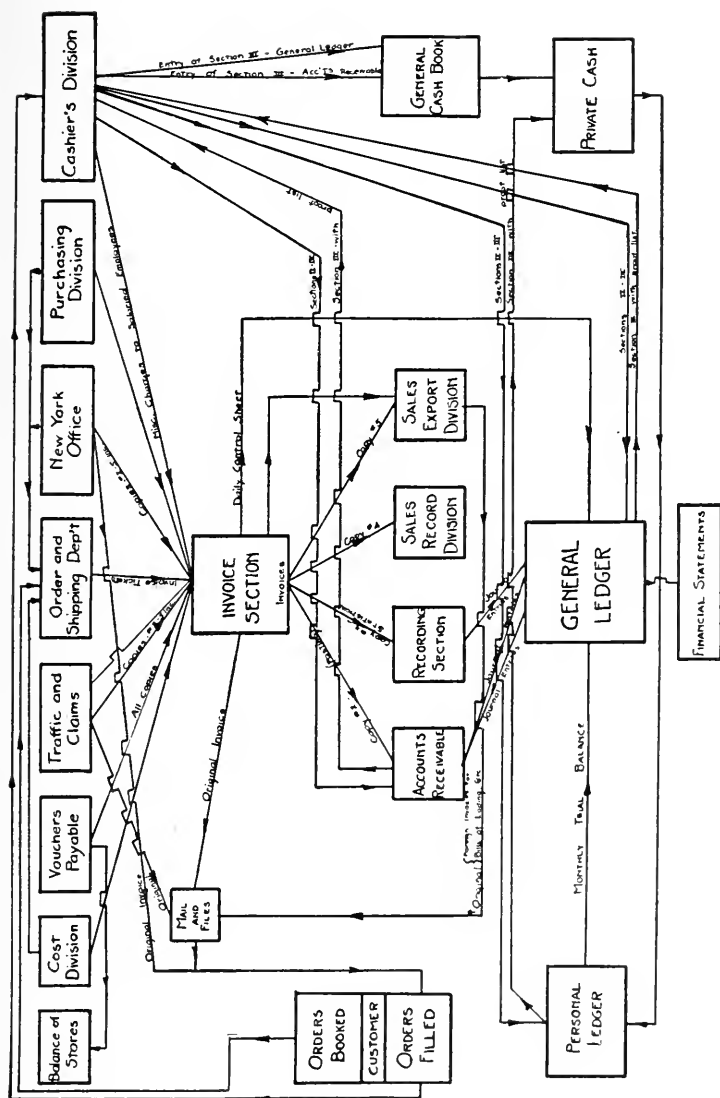


Figure 74. Relation of Invoice Section to Accounting Department
Starting at the left with "Orders Booked" and "Orders Filled" the relationship of the invoice section to the various activities of the accounting department may be readily traced.

left with the squares labeled "Orders Booked" and "Orders Filled," tracing first the operations involved in the booking and then those connected with the filling of an order. The method of dividing the accounting work into sections and the relation of one section to another is clearly shown.

The personnel of the invoice section consists of a supervisor, an analysis clerk, a checking clerk, and five billing machine operators. Its chief duty is to turn out two accounting documents: (1) a typed invoice, and (2) the credit memorandum. Both of these are made out in five copies and are sent to the same places:

1. Original to vendor
2. Posting copy to accounts receivable section
3. Statistical copy to recording section
4. Credit copy to credit department
5. Sales record copy to sales department

The invoices are made out from the shipping order, a copy of which is sent to the invoice section.

Method of Handling Invoices

In many large organizations handling a proportionate volume of business, invoices are usually from one to two days late in getting into the mail. Invoices should be sent out on the same day that the goods are shipped. In order to maintain a reputation for promptness in this matter, this company makes it a rule that the billing clerks must complete all orders for the day before going home. While this produces some hardship at certain busy seasons of the year, the effect is counterbalanced by the dull periods when work is slack.

The prompt handling of invoices is further facilitated by the use of billing machines. The operators in the invoice section make out invoices on a machine which automatically figures the discount. In this connection it may be mentioned

that mechanical devices are used wherever possible. In the accounts receivable section, for example, invoices are posted to the card ledgers by means of two bookkeeping machines which cope with all the work. The mechanical method of handling invoices and the ledgers has resulted in important savings. Four of the eight clerks who were formerly required to do this work have been transferred to the statistical department.

A final consideration in connection with invoicing is the inspection. The invoice is one point of contact with the outside public. Therefore accuracy and neatness must be insisted upon. To assure these things a checking clerk inspects every invoice for typographical errors, general appearance, and other defects; the cumulative effect of a disregard of these points creates an impression of slackness and unreliability.

Accounts Receivable Section

The duties of the accounts receivable section are to record and maintain the accounts with customers of the company, to make out the necessary monthly statements, and also to furnish a certain amount of data to the credit, order, shipping, and statistical departments.

The personnel is composed of a supervisor, six general clerks, two bookkeeping machine operators, and two ledger clerks. Previous to the installation of these bookkeeping machines and the card ledgers operated in connection with the machines, the company maintained six loose-leaf ledgers, each of which was in charge of a clerk. Under the present organization the trial balance can be had within three days. Under the old method it took six days to get it out. The cumbersome nature of the old equipment is in marked contrast with the neatness and compactness of the new. The card ledgers are divided into seven sections--A to C, D to F, and

so on—each a complete unit in itself and all controlled by the general bookkeeper. These ledger cards are filed alphabetically in a special file in which the alphabet is split 1,250 ways. It is probably one of the quickest files to work on the market. Under the new method the day's work can be proved each day; under the old method it could only be proved once a month.

Operation of Customers Ledger

The method of recording entries in the customers ledger is comparatively simple. On receipt of the posting copy of the invoice the ledger bookkeepers post on the bookkeeping machines the debits as shown by the invoice. The credits to customers' accounts are posted from "remittance" tickets which are records peculiar to the company. These tickets consist of two sections and are made out in the cashier's office. When a check is received, a notation is made on the stub of the ticket which stays in the cashier's department. The rest of the ticket is sent to the accounts receivable section where the amounts called for are posted to the customer's account, provided that the deductions made by the customer are O K. At the end of the day a list of the remittances posted is made, and this list is sent to the cashier who can thus see at a glance, by comparing the remittance numbers in the stub of his book with the remittance numbers on the list, the checks that have not been posted.

Daily Trial Balance

When the ledger has been posted a trial balance of each section is run off daily as a proof of the accounts receivable work for the day. This proof is presented to the general bookkeeper for his O K. If the work is correct he O K's it, but if the total is out of balance, he tells the ledger clerk, but he does not give him the correct balance. The bookkeeper

gets the correct balance from the recording section which analyzes the sales of the company daily. The cashier's remittance tickets are numbered numerically in bound books and each one must be accounted for by the cashier to the auditor.

The final duty of this section is to make out the monthly statements and send them to the credit department for mailing.

Recording Section

The recording section receives the statistical copy of the invoice and its work in general is to analyze sales, credits, returned goods; to make journal entries at the end of each month showing the gross sales, returned goods, and freight; to keep a stock record of the finished goods on hand and make all journal entries affecting finished goods at the end of the month; to keep a record of machinery showing its value, depreciation, machine rate, insurance numbers, and other data. It furnishes its record to the industrial engineer and the factory. The statistical work done by this section is largely compiled for cost information.

Vouchers Payable Section

The vouchers payable section with a personnel of ten clerks under the direction of a supervisor is in charge of the voucher record. Its duties are: (1) to record the liability to the vendor and (2) to control the typing and figuring of all checks liquidating the liabilities of the company. It furnishes data to the assistant treasurer, statistician, and purchasing department.

Before the installation of the voucher record and the payment of bills by voucher checks the company used a purchase journal. This has since been discontinued as has also the creditors ledger. The question as to whether a concern should use a purchase journal or voucher record is a matter to be determined by the circumstances of the case.

Use of Voucher Flags

When the vendor's invoice is received the mail opening department sends it to the vouchers payable section where it is "flagged," i.e., details of the invoice are written on a voucher flag or form. This flag is perforated through the center so that when torn in half the right-hand side can be retained by the vouchers payable section which files it by pay date. The left-hand side is glued to the invoice which is then sent to the scheduling section of the purchasing department where it is filed with the copy of the purchase order. By listing the invoices flagged, the vouchers payable section can approximately tell the amount of money the company will have to pay out each day. A further advantage gained by this method is that it enables the company to keep close track of discounts on purchases, as the flagged invoices are filed by pay date and thus turn up automatically when they require attention. By comparing the flags with the invoices that have been approved for payment by the purchasing department, the vouchers payable section can at once take advantage of the discount. The purchasing department is notified as soon as the goods are received and before they have been inspected so that the vouchers payable section can at once find out from the purchasing department just what the status of an invoice is—whether or not the goods have been shipped by the vendor, if there has been any delay, and what has been the cause of the delay. The company frequently pays its invoices before goods have been received so as to take advantage of the discounts. If the inspection proves the goods to be deficient in quality, quantity, or price the matter is adjusted later by sending a notice to the invoice section, which makes out either an invoice or a credit memorandum. An invoice is made out for an overcharge, a credit memorandum for an undercharge.

Cashier's Section

The organization of the cashier's section is especially interesting as showing the variations possible to meet local conditions. This section is in charge of a cashier who handles the imprest cash book, the bank records, all income and outgo of cash, and is responsible to the secretary and assistant treasurer. Under the direction of the cashier are a chief paymaster and an assistant cashier. The pay-roll department makes up the pay-roll, but the chief paymaster puts the money in the envelopes. This provides for a complete separation of the make-up of the pay-roll and the paying functions.

In addition to these regular duties, this section takes care of the trade commitments—really a forecast of the future payments for which the company has committed itself, for goods ordered but not received—which payments are classified by material store groups. This information is obtained from the copy of the purchase order which is sent to the cashier's section.

The foregoing methods represent the practice of a modern accounting department in handling the accounts receivable and accounts payable; this work constitutes the greater part of the duties of the accounting department.

CHAPTER XXIX

THE CONTROL OF ACCOUNTING ACTIVITIES

The Measurement and Control of Work

The greatest obstacle to the control of clerical activities in most departments has hitherto been the difficulty of reducing many varied routine operations to a schedule and maintaining and controlling the schedule without excessive outlay for clerical labor. Machinery is fast removing this difficulty from the accounting department. The time required to make complete analyses, classifications, extensive compilations, and the like, can now be accurately estimated and quickly measured, so that today the chief obstacle to the general adoption of schedules in this department seems to be lack of comprehension of the possibilities of operating them. This attitude is reinforced by the long habit of expecting accounting reports to come in a "few days" behind the time set, and of considering that overtime for bookkeepers at certain recurring periods is as natural and unescapable as the law of gravitation.

Before adequate control, according to modern standards of office management, can be secured, clerical duties must be clearly defined. In many up-to-date accounting departments the work is measured and controlled by what can be done at each desk, rather than by what can be performed individually. In these organizations the work has been so closely analyzed and then so finely adjusted to equipment and personnel that a certain number of duties can be assigned to each desk. This method has the virtue of not only clearly separating the activities into readily recognized units but giving to the separation a physical basis as well.

Systematizing the Work in a Small Business

To systematize the routine of the accounting department in a small business is not a difficult task. The manager must first analyze the work to be done daily, weekly, monthly, and one or more times a year. Then the clerical force must be examined and tested as to the time required to handle the work according to the schedule established, as explained in Chapter IV.

Such an investigation, made to determine the things which must be done daily and monthly in the accounting department of a garage business, resulted in the manager mapping out the following simple schedule of the duties of his bookkeepers.

DAILY SCHEDULE OF ACCOUNTING WORK

PETTY CASH:

Make petty cash disbursements and obtain receipts for each disbursement.

Enter vouchers in summary.

Balance the record.

CASH AND SALES RECORD:

Enter all tickets in the record.

Foot and balance the record.

Make the bank deposit.

Prove the cash received with the cash register and the cash record.

Post all charges and credits to the customers' accounts and check against the amounts entered in the cash and sales record.

Make registered tickets for storage charges for the following month.

BANK RECORD:

Enter all checks drawn.

Enter deposits made in the "deposit" column.

Balance the record and find the balance in bank.

PURCHASE RECORD:

Enter all invoices in purchase record.

Mark off all invoices paid from the creditors column in the bank record.

MONTHLY SCHEDULE OF ACCOUNTING WORK

BANK RECORD:

- Reconcile bank account.
- Rule up record.
- Post to the private ledger.

FOOT, RULE UP, AND POST:

- Cash and sales record.
- Purchase record.
- Petty cash record.

JOURNALIZE:

- Commissions.
- Post journal.

CAR STOCK:

- Write up cars received and sold and find the number and value of the cars on hand, and the number and value of cars sold but not delivered, and get the balance of the car stock account.
- Check car stock record with cars "on hand" and open a new record for the following month.

PROVE CONTROLLING ACCOUNTS FOR:

- Customers' accounts.
- Creditors' accounts.

TAKE TRIAL BALANCE AND COMPLETE STATEMENT.

Building Up the Detailed Schedule

The schedule of the entries and posting cited above may be all that is necessary in a small business where the work is done by a few clerks. With the pressure of the work constant and the head bookkeeper always present, the manager can gage the work fairly well and the schedule should insure his getting the results called for. But in a large organization where specialization has been carried to a fine point, it is necessary to divide the various duties into operations and standardize them accordingly, i.e., furnish each clerical employee with written instructions as to just how a particular duty or each piece of accounting work is to be done.

In illustration of this method the procedure adopted in

the office of a public service corporation is cited. Frequent delays were experienced in getting out a correct trial balance, because of mistakes caused by the difference in the procedure of the various bookkeepers when posting to accounts. The office manager remedied the defect by standardizing the methods of handling the various records and classes of accounts. An "order of work" schedule was made out for each account classification and special instructions were issued for the method of treating those accounts which presented any difficulty. For example, a somewhat complicated account was that headed "P. A. Fuel" in which was recorded the cost of coal consumed. The instructions issued to cover the method of treatment were as follows:

1. Check footing of coal received and sold on Fuel Report.
2. Check amount "On Hand First of Month" with amount "On Hand End of Month" shown on Fuel Report for preceding month.
3. Check amount "Received During Month" with total coal received as shown.
4. Check amount "Sold" with total sales as shown.
5. Check all additions and subtractions involved in arriving at amount of coal used and accounted for.
6. Convert pounds of coal used into tons, carrying out to two decimal points.
7. To check calculations, all divisions are to be multiplied back and all multiplications are to be divided back.
8. Show cost of coal used on face of Fuel Report in following manner:

Used.....lbs. =tons, @
 \$. = \$.

The following instructions were given as to the method to be pursued in calculating the composite or average cost per ton of the total coal on hand first of month and coal received during month and in proving up the "fuel stock" account in the general ledger.

TO ASCERTAIN AVERAGE COST PER TON

1. Check the weight of each car of coal received shown on

Fuel Report with the weight of each car shown on "Charges to Fuel Stock," the latter showing the bills received and charged during the month. Mark in red ink on Fuel Report "Missing" against those cars for which bills have not been received.

2. Obtain from bookkeeper the credits to "Fuel Stock," if any, covering sales of coal or allowances by shippers and check sales so reported with sales shown on Fuel Report.
3. Use the reverse side of "Charges to Fuel Stock" for the following calculation:
4. Start off with general ledger balance last of preceding month.
5. Add total of charges shown on "Charges to Fuel Stock."
6. Add estimated charge for missing bills.
7. Deduct allowance by shippers (if any).
8. Result: total cost of coal on hand first of month and received during month.
9. Convert total pounds of coal on hand first of month and received during month into tons, carrying out two decimal points.
10. Ascertain composite or average cost per ton in dollars and cents by dividing tons (Section 9) into cost (Section 8).
11. Show average cost per ton (Section 10) alongside the total cost (Section 8).

TO PROVE UP GENERAL LEDGER

12. Deduct from total cost, the cost of coal used previously calculated and entered on journal and the proceeds of coal sold as reported or estimated.
13. Deduct the estimated charge for missing bills.
14. Result: general ledger balance close of month.
15. Check result (Section 14) with actual general ledger balance.

FORM TO BE USED ON REVERSE SIDE OF "CHARGES TO FUEL STOCK"

G. L. Balance.....	\$.....
.....charges.	
Add missing bills (detail car numbers)	.....
Deduct allowance I. & C.	.....
Total cost (average cost, \$.....)	.....

Used .....	.....
Sold .....	.....
Deduct missing bills.....	.....
G. L. Balance.....	\$.....

NOTE: All additions and subtractions must be checked; all divisions are to be multiplied back and all multiplications divided back and great care is to be used in transcribing figures. Also the Fuel Report and "Charges to Fuel Stock" are to be pin-clipped together for filing.

Method of Checking Up Schedule of Work

After standardizing the operations connected with the performance of a specific duty, as illustrated in the preceding section, the next step is to devise a method of checking up and holding employees to the performance of the schedule of work. The methods employed in the accounting office of a railroad, where all work has been standardized and is paid for at hourly rates for specific classes of work, will serve to explain the general procedure and the forms that need to be devised for reporting the progress of work and thus measuring output.

In the office under consideration the personnel consists of 3 stenographers, 6 dictating machine operators, 20 typists, and clerks, and 50 adding machine operators. For administrative purposes the department is divided into six sections with a chief clerk at the head of each, to whom employees report the progress of work.

Mechanism of Control

The mechanism of control consists of the following:

1. An official number for each employee.
2. A symbol for each class of work.
3. A daily job report slip.
4. An individual monthly time sheet.
5. A job record sheet.
6. A recapitulation sheet.

The object to be attained is the collection of two groups of data: (1) figures representing the number of "units of work" performed by each individual; (2) figures showing the number of hours spent by each person on each kind of work. These figures enable the statistical clerk to determine two important things: first the relative efficiency of each employee, i.e., how his work compares with that of other employees doing the same task, and with similar work previously done by him; and secondly the correct distribution of time and of costs over individual jobs.

By gathering daily totals of the units of work performed by each employee, the office manager can keep a close watch upon the individual's value to the department. By summarizing these totals he is able to compare the efficiency of the department day by day and month by month with similar preceding periods of time.

The Unit of Work

The "unit of work" is an important feature of the system and its successful operation largely depends upon the correct standardization of all clerical operations into units. Such a unit is the amount of a given kind of work that can be performed *in a minute* by the average industrious employee working under normal conditions and at normal speed. Thus, if the average amount of transcription from stenographic notes with a standard line length of 6 inches is 180 lines an hour, the unit of work of stenographers is 3 lines. In the case of typists doing straight copying the unit may be 4 lines. Clerks who extend local way-bills may average 60 bills an hour and the unit of work in this case would be 1 way-bill. Clerks who make up freight bills may average 30 an hour, in which case the unit of work is $\frac{1}{2}$ bill. All employees report the amount of work done *in units* and at the same time give the time length of the task.

The advantages of this method of standardization are thus apparent. Work can be quickly measured and the time easily reported. An employee whose report shows less than one unit a minute is below the average in industry or ability; those who average more than 60 units an hour are proportionately efficient. If all employees on a certain class of work consistently do more than 60 units an hour, the standard amount which is supposed to represent a minute's work needs to be raised; if they consistently do less, the standard should be lowered. Further advantages derived from the unit method of standardization will be seen as the description of the system develops.

The Report and Record of Employees

Employees report the amount of work done on two forms, an individual report on separate jobs (Figure 75) and a monthly record of work performed (Figure 76). On the individual reports are entered the clerk's number, the job symbol, the number of units finished, with the time consumed, and the date. If a clerk works on several jobs during the day, he makes out a slip in each case.

(511)	Extending local way-bills
	276—4 hours
No. 81	9/27/18

Figure 75. Report of Units Done

Individual report on which each employee reports daily the units of work done on each job.

At the end of the day the employee takes out the monthly record sheet (Figure 76) and enters on it the data from the job slips. These data are classified by kind of work done,

REPORT OF WORK PERFORMED														
By _____														
_____ DIVISION FOR THE MONTH OF _____ 1918														
GROUP										Hrs. on Duty	Total Time	In A.M.	Out P.M.	Certification of Head Clerk.
Day of Month	Time expended - Hours													
1														
2														
3														
4														
5														
6														
30														
31														
TOTAL HOURS														
Rate														
Amount														
Total hours regular time for which compensation is \$_____ per _____ Mrs. _____														

Figure 76. Employee's Monthly Record Sheet

On which data from individual daily reports are entered and classified.

i.e., the group of clerical activities into which it falls. To this end a number of spaces are provided under the heading "Group" in which the symbols representing the kind of work performed (see Chapter IV) are entered. Below the symbol the time expended (not the units, be it noted) is entered in the square, on a line with the day of the month. The clerk must account for 8 hours daily unless overtime is worked. A study of the individual report and the monthly record will make clear that the first form gathers data upon the kind and quantity of work done, and the second upon the time spent in doing it. We have now to consider the method of summarizing this data for control purposes.

Recording the Amount of Work Done

Before the employee leaves for the day he turns in both the job slip and the time sheet to the head clerk who verifies the entries on them, taking special pains to check up the time

data and see that eight hours are accounted for. These records are now passed on to the statistical department, and the time sheet, after being signed, is sent back to the employee's desk to be used the next day.

The statistical clerk sorts the slips according to the group or kind of work and copies the records upon a group record card (Figure 77). A set of these cards is kept for each class of work.

The first column shows at the top the number of the card in the series and below, the days of the month; the second column shows the total number of units and time taken by all employees doing this class of work other than those whose records are shown on the card. Columns 3 to 7 show the records of individual employees and are headed with their numbers; the last column gives the grand total of all units of this class of work. One card holds the record of five employees and as many cards as needed may be used by cross-footing and carrying the totals forward to another card. The official number of an employee is placed at the head of each of the five columns and below are entered the units of work and time taken for each. The record covers a month.

While making up the above record the statistical clerk looks out for all daily outputs that are not up to standard requirements. This is easily noted, for he has a list showing the requirements for each class of work determined on the basis of so many units per hour. When an employee's record falls below the standard, a memo of the fact is sent to the chief clerk. From this record a list is also made up which shows the ranking of employees according to their ability to turn out work. By looking up the individual record cards and dividing the total number of units produced into the total time consumed, an average per hour is arrived at which determines the rank of the clerk.

5 72	Br T Forw'd	91				GRAND TOTAL
8/2	6,634-105 $\frac{1}{4}$	173-8				6,807-113 $\frac{1}{4}$
3	7,380-110	329-8				7,709-118
5	7,231-106 $\frac{1}{2}$	460-8				7,691-114 $\frac{1}{2}$
6	7,147-112	500-8				7,647-120
7	3,571-59	136-4				3,707-63
9	7,555-104	527-8				8,082-112
10	4,975-82 $\frac{1}{2}$	530-8				5,505-90 $\frac{1}{2}$
11	3,540-58	126-3 $\frac{1}{2}$				3,666-61 $\frac{1}{2}$
12	2,370-32	475-8				2,845-40
13	1,912-31 $\frac{1}{2}$					1,942-31 $\frac{1}{2}$
Etc.		7,837-138				132,991-2,061 $\frac{1}{4}$ hours

Figure 77. Group Record Cards

Kept for each class of work, and continued from card to card, each card covering the record of five employees. Shows the number of units done by each employee and the total units of all employees.

DATE	May, 1918					
	511-LOCAL		510-1 L.		25-A's	
	UNITS	HOURS	UNITS	HOURS	UNITS	HOURS
1	26,900	94	2,228	7 $\frac{3}{4}$	23,610	
2	34,536	118 $\frac{1}{4}$	1,380	6	13,179	
3	29,149	112 $\frac{1}{2}$	3,001	11 $\frac{1}{2}$	13,494	
4	30,679	113 $\frac{3}{4}$	8,585	33	11,499	
5	22,081	84	6,176	22 $\frac{3}{4}$	7,188	
7	47,880	168 $\frac{1}{2}$	11,627	41	23,127	
Etc.						
	477,360	1,727				

Figure 78. Recapitulation Sheet

Showing units and hours of work performed to date of the different classes of work symbolized in the headings.

Summarizing the Total Output

The totals obtained by cross-footing the cards, when summarized, give the statistical information necessary to judge the progress of the department as a whole—one footing gives the number of units handled for the day and the other gives the time consumed. These totals are collected daily upon a separate form, the “Recapitulation Sheet” here illustrated (Figure 78).

Two columns are provided for each job—one for the daily totals of units of work done by all employees working on that job and another for the hours taken. Thus for each day a clean-cut running record of the number of units completed up-to-date and the time taken is made up; by this the office manager can judge of the progress of the department. Also, when the daily totals for the last day of the month are entered on the recapitulation sheet, it is footed and the new totals give the number of units completed and the time taken on each class of work, for the whole month.

Determining the Cost of Work

The monthly time sheet, by showing the time of an employee on each job, furnishes the data for determining the labor cost of each class of work. The time on each job multiplied by the employee's rate per hour gives the labor cost for that particular work. Thus, the complete cost of any one class of work is determined by accumulating the costs shown on the monthly time sheets.

Control Obtained at Low Cost

While the system described is used, as before stated, by a large railroad corporation, the principles on which it is based are so simple that they can readily be adapted to the use of a small organization. The cost to the railroad company for the records used was only a few dollars a month,

while the clerical work was taken care of by one statistical clerk who handled the computations and prepared the reports and charts. Where a similar system of control is used, it is an economy in the end to put all the work involved in the hands of an employee who is familiar with statistical methods and "likes to figure."

PART VI

THE TRAINING AND DEVELOPMENT OF
OFFICE WORKERS

CHAPTER XXX

THE SELECTION OF THE RIGHT EMPLOYEE

Selection and Training in Stabilizing Employment

Alert business men no longer ignore strong economic and social tendencies as they did in the past. The fact that the 40,000,000 jobs in the United States furnish nearly 50,000,000 changes in work each year, with an annual loss of over a billion dollars, or an average cost of \$25 for each change of job, has finally brought the question of stability of employment, in so far as it depends upon the selection and training of employees, prominently to the front. It is only within the past three or four years that the great waste due to thoughtless hiring and firing of employees has been given serious consideration.

An office is a huge machine with many delicate parts. Every individual in it is either a help or a clog. A few years ago factory superintendents bought lubricating oil without testing, but experience has shown that there are great differences in oils and that machines work better and last longer when care is exercised in choosing the lubricant best suited to the machine and its work. The office machine is now being studied with a similar result. New employees are tested before they are taken into the organization, experience showing that some types of employees work better, and with more efficiency, at certain kinds of jobs than at others. The scientific selection of employees, followed by specialized training to fit them for their jobs and promotion as soon as they show fitness to be advanced, is the most rational way of giving stability to employment and of attacking the evil of labor turnover at its root.

Stabilizing the Requirements of a Position

Before the suitability of an applicant for a given job can be considered two factors must be analyzed: (1) the qualifications necessary or desirable for the position; (2) the test necessary to determine whether an applicant meets these requirements.

The tests as to the applicant's fitness for the job consist in the "discovery" of these aptitudes through inquiries and examinations. A difficulty which here arises is to determine suitable standards of measurement for judging a man's abilities. To decide that a man is "good," and to recommend him to another in that term, seldom conveys any real information, since the judgment is expressed in general terms and is based on an inadequate estimation of the ability of the employee. To remedy the short-comings of the "general recommendation" as to ability, experiments have recently been made. These experiments prove that a man can be judged more accurately if the estimations and various tests of ability can be reduced to "quantitative" determinations, that is, if a man's attributes can be definitely rated. This applies to knowledge, physical condition, mental alertness, and so on.

Testing the Applicant's General Intelligence

The tests as to mental alertness shown below, have been suggested by Professor Walter Dill Scott, and adopted by thirty leading American firms. It has been found that the most brilliant adult applicants complete the test, as here presented, in about fourteen minutes:

Read the general directions before you do anything else.

Do what the printed directions tell you to do.

Do not ask any other person who is taking the examination questions, or watch anyone to see what he or she does.

Work as rapidly as you can without making any mistakes.

If you do make a mistake, correct it neatly.

Do 1 first, then 2, then 3, and so on.

1. Write your name and address.

Instructions for 2, 3, and 4: After each word printed below write some word, according to the further directions. Write plainly, but as quickly as you can. If you cannot think of the right word in about 3 seconds, go on to the next.

2. Write words that fit the words in this column, as shown in the first three.

good—bad	far—
day—night	smooth—
up—down	early—
long—	dead—
soft—	hot—
white—	asleep—

3. Write words that fit the words in this column, in the way shown in the first three.

drink—water	scold—
ask—questions—	win—
subtract—numbers	answer—
sing—	weave—
build—	wink—
wear—	mend—

4. Write words that tell what sort of a thing each thing named is, as shown in the first three.

lily—flower	quinine—
blue—color	beef—
diamond—jewel	canoe—
oak—	banana—
measles—	Atlantic—
shark—	Alps—
July—	

5. Add 17 to each of these numbers. Write the answers as shown in the first three.

29—46	10—
18—35	61—
60—77	71—
64—	33—
49—	38—
62—	28—
57—	65—
68—	41—
74—	50—
53—	42—
67—	58—

6. Get the answers to these problems as quickly as you can:

- (a) What number minus 16 equals 20?
- (b) A man spent $\frac{2}{3}$ of his money and had \$8 left. How much had he at first?
- (c) At 15 cents a yard, how much will 7 feet of cloth cost?
- (d) A man bought land for \$100. He sold it for \$120, gaining \$5 an acre. How many acres were there?
- (e) If $\frac{3}{4}$ of a gallon of oil costs 9 cents what will seven gallons cost?
- (f) Write opposites for this column, as shown in the first three. If you cannot think of the right word in about 10 seconds, go on to the next.

bravery—cowardice
 friend—enemy
 true—false
 serious—
 grand—
 to win—
 to respect—
 frequently—
 to lack—
 apart—
 stormy—
 motion—

forcible—
 straight—
 to hold—
 after—
 to float—
 rough—
 to bless—
 to take—
 exciting—
 clumsy—
 unless—

7. Write in each line a fourth word that fits the third word in that line in the way that the second word fits the first, as shown in the first three lines. If you cannot think of the right word in about 10 seconds, go ahead.

color—red; name—John
 page—book; handle—knife
 fire—burns; soldiers—fight
 eye—see; ear—
 Monday—Tuesday; April—
 do—did; see—
 bird—sings; dog—
 hour—minute; minute—
 straw—hat; leather—
 cloud—rain; sun—
 hammer—tool; dictionary—
 uncle— aunt; brother—
 dog—puppy; cat—
 little—less; much—
 wash—face; sweep—
 house—room; book—
 sky—blue; grass—

swim—water; fly—
 once—one; twice—
 cat—fur; bird—
 pan—tin; table—
 buy—sell; come—
 oyster—shell; banana—

8. Do what it says to do as quickly as you can, but be careful to notice just what it does say.

With your pencil make a dot over any one of these letters—F.G.H.I.J. and a comma after the longest of these three words: boy mother girl. Then, if Christmas comes in March, make a cross right here....but if not, pass along to the next question and tell where the sun rises..... If you believe that Edison discovered America, cross out what you just wrote, but if it was someone else, put in a number to complete this sentence: "A horse has.....feet." Write, yes; no matter whether China is in Africa or not; and then give a wrong answer to this question: "How many days are there in the week?"..... Write any letter except g just after this comma,.....and then write no if 2 times 5 are 10..... Now if Tuesday came after Monday, make two crosses here.....; but if not, make a circle here.....or else a square here..... Be sure to make three crosses between these two names of boys: George.....Henry. Notice these two numbers: 3, 5. If iron is heavier than water, write larger number here..... But if iron is lighter write the smaller number here..... Show by a cross when the nights are longer; in summer?.....in winter?..... Give the correct answer to this question, "Does water run up-hill?"..... and repeat your answer here..... Do nothing here (5 plus 7 equals.....unless you skipped the preceding question; but write the first letter of your first name and the last letter of your last name at the ends of this line

9. Place in the parentheses preceding each English proverb the number of the African proverb to which the English proverb corresponds in meaning.

ENGLISH PROVERBS

- () Married in haste, we repent at leisure.
- () Answer a fool according to his folly.
- () One swallow does not make a summer.

- () First catch your hare.
- () Adding insult to injury.
- () Curses come home to roost.
- () Distance lends enchantment to the view.
- () We can all endure the misfortune of others.

AFRICAN PROVERBS

1. One tree does not make a forest.
2. I nearly killed the bird. No one can eat "nearly" in a stew.
3. Full-belly child says to hungry-belly child, "Keep good cheer."
4. Distant firewood is good firewood.
5. Ashes fly in the face of him who throws them.
6. If the boy says he wants to tie the water with a string, ask whether he means the water in the pot or the water in the lagoon.
7. The ground-pig said: "I do not feel so angry with the man who killed me as with the man who dashed me on the ground afterward."
8. Quick loving a woman means quick not loving a woman.

Selection Based on Specification

In hiring employees a practical question at once presents itself, similar to that which arises when a purchase is made of materials and supplies. Instead of asking, "On whose requisition shall I buy material?" the employment manager asks, "On whose requisition shall I buy services?" This is easily answered by putting the responsibility upon the department head needing the services. The qualifications needed for the job should be listed on the requisition, so that the selection can be intelligently made. This involves job analysis—one of the most difficult and fundamental functions connected with the scientific selection of workers. Since the initiative here usually falls upon the employment manager, he should be thoroughly posted on the methods and purposes involved in analyzing the operations and conditions connected with a job.

Uses of Job Analysis

Job analysis is carried on for two reasons: (1) it may be used to arrive at satisfactory wage schedules, or (2) to help in the selection, training, and promotion of employees. How it aids in both these directions may be better understood if typical cases are taken.

To arrive at a satisfactory wage schedule, one large office organization classifies its clerical employees under five groups, setting salaries for each group as follows:

Class	Rank	Salary	Condition
E	Boys	\$300 360 430	1st yr. 2nd yr. 3rd yr. Advances auto- matic
D	Junior Clerks Men and women	420 480 540 600	1st yr. 2nd yr. 3rd yr. 4th yr. Advances auto- matic
C	Senior clerks Men and women	660 minimum 960 maximum	Variations from minimum fixed by salary committee. Advances by rec- ommendation only.
B	Special clerks Men and women	1,000 minimum 1,800 maximum	Variations fixed by salary committee. Advance by rec- ommendation only.
A	Technical and supervising clerks	Over \$1,800	Minimum and max- imum fixed by salary committee. Advance by rec- ommendation only.

The method by which these classifications were arrived at is interesting. An expert was brought in to study the situation. When his classifications were completed, and his recommendations ready, a committee of department heads was appointed, made up of men who, by years of experience, could judge the technical difficulties and the relative importance

of the positions with great accuracy. "As we came to certain employees," says the employment manager, "we said, 'What does this man do?' The replies we received from the interested department heads determined the class in which we placed him. It was not difficult. If the expert wanted to put a clerk in a certain group which overlapped another group, the next head of department would say: 'You cannot do that because here is John Jones who does similar work.' In that way we got together. Furthermore, we were surprised to see how closely our estimations matched with the classifications recommended."

The promotion of employees, as based on this classification, is made by consulting an index. The name at the head of the list of any class has preference for promotion to a vacancy in the next higher class.

Method of Analyzing a Job

In making an analysis of a particular job, patience and care are required. Not only must the motions in performing the job be analyzed but also the particular mental, physical, or moral quality needed to do it efficiently. In one department of a business for example, complaints were made that mistakes were occurring in making out the time tickets. Investigation showed that 200,000 time tickets per week were made out and that about 10,000 were wrong, with the result that 35 persons were kept busy looking up mistakes. To discover what caused the mistakes it was necessary to know: (1) exactly what each job consisted of or, as the following table shows, "the component parts of the job"; (2) what operations were falling below standard requirements; and (3) the kind of fault, i.e., mental, physical, or temperamental, that was responsible for the trouble. Finally a remedy was suggested based upon standards arrived at by close study

of the various elements involved. When completed the analysis showed the results given in the following chart:

JOB ANALYSIS OF TIME CLERK'S WORK						
LISTING TROUBLES	COMPUTING EXTENT OF LOSSES DUE TO FAULTS	COMPONENT PARTS OF THE JOB	TESTING THE OPERATIONS	KIND OF FAULTS	CAUSE OF TROUBLES	REMEDY
<i>Mistakes on tickets.</i>	<i>Of 200,000 tickets per week, 10,000 or 5%. 35 inspectors busy on looking up mistakes.</i>	<i>To figure totals a. Hours worked per day d. Hours worked per week.</i>	<i>Read numbers up to six digits. Select from file a piece rate card. Judge which rate applies.</i>	<i>Horizontal totals badly added; figuring elapsed time, and addition of total hours worked making most trouble. Lack of mental aptitude and special training.</i>	<i>Lack the power of association and have not general intelligence.</i>	<i>Select men by special tests. Follow up after 7 mos.</i>

Job Analysis of Time Clerk's Work

The above analysis is not as detailed as one made for the purpose of time or motion study. Only the major components are here enumerated, but those are sufficient to indicate the special requirements of the time clerk in charge of the job. A study of the above sheet will show how such an analysis may be used in the selection of employees.

Testing the Candidate's Fitness for the Job

Having decided that one mistake in twenty was too high a ratio for this kind of work, investigation showed that mis-

takes were chiefly made in figuring simple problems such as the following:

1. A man's time ticket shows that he came to work at 7:30 in the morning, left at 2:45 in the afternoon, taking $\frac{3}{4}$ of an hour for luncheon. How long did he work?
2. A man worked $6\frac{3}{4}$ hours on Monday, $8\frac{1}{2}$ hours on Tuesday, $7\frac{1}{2}$ on Wednesday, etc., throughout the week. Give the total for this period.
Etc.

To be sure, the opportunities for mistakes outside the mental calculations had to be carefully checked—in copying figures the chance of transposition crept in; in reading the work order numbers, often running into six digits, many slips occurred; in fixing the piece rate the time clerk had to select quickly from the files the right card and judge which rate applied. But in this case the analysis showed that the mistakes were made in figuring the time worked. The remedy obviously consisted in selecting time clerks who could do simple sums in mental arithmetic with ease and accuracy.

Tests as to Mathematical Ability

To determine the applicant's ability in this direction the three following tests were devised:

The first test consisted of 100 simple sums in addition, and the applicant was required to write the answer to as many combinations as possible in one minute's time. It was found that the average for successful clerks was 50 per minute and that men falling as low as 40 in one minute were seldom successful as time clerks.

In the second test a sheet was ruled into spaces in which the time a man began work, and the time he finished, were shown. In making the computations one hour had to be

allowed for lunch. The standard performance, fixed at 20 minutes, was based on the work of competent clerks who could compute the same figures in an average time of 15 minutes.

The third test consisted of the addition of figures (many of them of fractional amounts) arranged horizontally in the way they appeared on the time tickets. The standard set was 10 correct answers in 4 minutes and the time was also based on an average performance under working conditions, which was 16 in 4 minutes.

Checking up the Tests

The applicants who passed the three tests were graded and put to work. Four months later when the men were again tested it was found that the agreement between the first and second gradings was as high as 87 per cent. Another feature disclosed by the second test was that those candidates who ranked high in the first test held their lead in the departmental work. "In fact," said the employment manager of this particular office, "there is not a man who ranked No. 4 who is on a clerical job at all. There is only one who ranked No. 3 holding a position and he is not doing time work. The men who ranked No. 1 and No. 2 are either head time clerks or head record clerks."

Requisitions for Labor Based on Job Analysis

In both factory and office the common practice, when requisitioning labor, is for the heads of departments to send a simple request to the front office for a "man" or "clerk." Job analysis is changing all this. One concern that is just swinging from the old method to the new, believes that the analysis of jobs should be made under the direction of the employment department, but that foremen should be permitted to fill out the requisitions. The employment manager

makes the selection and keeps all records. For example, when a foreman who wants, say a "grinder," consults his records, he finds that the analysis of the job shows that it is advisable to select grinders with the following characteristics:

Nationality. Polish, Lithuanians, or Americans, if experienced, or Americans who want to try the job after being told that the work is hard, and wet, and that the majority of the men are Polish, but that the job pays good money. Ask them if they are ever troubled with their backs or rheumatism.

Physique. Generally strong and big-boned. Some small, wiry men make good, but not many of them.

REQUISITION FOR HELP	
NOTE: Always use this form when in need of help and whenever possible notify Employment Department one week ahead.	
September 5, 1918.	
EMPLOYMENT DEPARTMENT	
Please employ for Department ...16... one ...man... age ...20... to ...40... with following qualifications: .. <i>Polish</i> ... with experience if possible, or American desiring to learn the job. Strong, sober man and.....	
Kind of work wanted for: <i>grinding</i>	
Wages to start: <i>new rates</i> Chances of advancement: ... <i>piece-work</i> ...	
Steady or temporary work: ... <i>steady</i> ... When needed: ... <i>at once</i> ...	
Signed: ... <i>John McBride, Dept. 16</i> ...	

Figure 79. Requisition for Help

This form is used when a department is in need of help. The employment department is notified thereon at least one week in advance.

Explain that he must wear gloves, boots, and aprons for wet grinding, which we furnish and for which they pay at the rate of \$1 a week.

The foreman then fills out the requisition slip (Figure 79) and sends it to the employment manager. The reverse side

of this form is ruled and captioned to contain an analysis of the record of the employee when first hired.

Use of the Application Form

Having determined the qualities needed for a particular job, the next step in the selection of an employee is to check up the characteristics of the applicant. This is done by using a standard application card (Figure 80) which has two functions: (1) to determine the applicant's fitness for the job,

APPLICATION FOR POSITION					
No.....					Date.....
Name.....	Address.....		Read English.....		
			Write ".....		
Married.....			Speak ".....		
Single.....	Age.....	Wt.....	Height.....		
Now employed at.....		Address.....			
Last " ".....			Why released.....		
How long.....					
Last four places worked.					
Place.....	How long.....	Why quit.....			
Place.....	" "	" "			
Place.....	" "	" "			
Place.....	" "	" "			
Wages earned.....time		Wages expected.....			
		piece			
Kind of work done.....					
" " " desired.....	Nationality.....				
Remarks					

Figure 80. Application for Position

The applicant for a position fills in the necessary details on this form.

and (2) to serve as a future follow-up in connection with wages, progress, promotion, rehiring, compensation for injuries, and the like. A mistake in selection is serious, since

incompetence is only revealed by "spoiled work." When the record as shown is supplemented by a complete job analysis, its utility is greatly increased.

Tests as to the Desirability of Applicant

In addition to the applicant's fitness for the job, it is frequently necessary to find out whether or not he is a desirable sort of man to take into the organization. Too many firms neglect this important factor because of the trouble involved in following up a man's references. "Unfortunately," says Professor Scott, "this very important factor is frequently regarded as useless because of the impossibility of securing trustworthy and usable information from previous employers." In an attempt to secure trustworthy information the following blank (Figure 81) has been devised and successfully used.

It will be noted that this blank does not encourage the former employer to use general or meaningless expressions, but whatever he says is strictly to the point. Where possible, the blank should be filled out by the last three employers. If all previous employers fill in all the blanks under "Good" and put a "1" in the last paragraph, the applicant is given 100 per cent on his previous record. Corresponding percentages are given for the various combinations found in the blank.

The Transfer or Promotion of Employees

In large concerns men frequently apply for transfer from one department of the business to another. In such cases the original application blank may be made to serve as a means of rounding up the history of an employee. Before transferring employees from one department to another, or before promoting them, the New York Edison Company consults the back of the original application blank on which are entered the reports of previous employers, of the employ-

ment manager, and of the head of the company's training school. Every employee of the company, new and old alike, must attend classes, which begin in October and end in May, and the school record made by the student is often the de-

REFERENCE FORM			
			.....1918
.....			
.....			
Dear Sir:			
Mr.....	of.....		
has applied to us for a position as.....and given you			
as reference. He states that he was employed by you as.....			
.....for a period of.....			
Will you please advise whether this information is correct?			
.....			
Why did the applicant leave your employment?.....			
.....			
Please place a check in the space below that indicates the character of his service.			
	Good	Fair	Satisfactory
Work	()	()	()
Conduct	()	()	()
Ability	()	()	()
Character	()	()	()
Would you be willing to re-employ him?.....			
Would you recommend him for the position applied for?.....			
Out of ten men filling the position which the applicant held with			
you, what would be his comparative rank?.....			
(If he would be the best, please mark his rank "1"; if the			
poorest, please mark his rank "10"; this estimate is, of course,			
only approximate, but we will greatly appreciate your best			
judgment in the matter.)			
Sincerely yours,			
.....			

Figure 81. Reference Form

This form is sent to the applicant's previous employers with a request to furnish the required information.

termining factor in his promotion. Classes meet once a week. Every alternate week a written examination is held covering the class work of the period. Pupils are graded, at the end of the year, and must obtain a mark of 75 per cent to advance in grades. If they fall below the mark they must take the work over again. If, after repeated trials, a student fails to reach the desired grade, he is not discharged, but as Mr. Henderschott, the educational director of the concern, says:

IMPRESSION BLANK		
Name of Applicant.....		
Address		
Position Considered for.....		
Interviewed by		
What was your first general impression of the applicant?.....		
Personal Appearance		
What, if any, peculiarity or characteristic impressed you?.....		
Instinctively did you like or dislike the applicant?.....		
Why?		
Do you think the applicant is fitted, or can fit himself, to the position applied for?.....		
What, in your opinion, is the applicant best fitted to do?.....		
Do you think the applicant temperate?.....		
Healthy	Happy	Honest
Trustworthy	A Worker	Steady
Patient	Quick	Neat
Self-reliant	Obedient	Respectful
Courteous	Punctual	Orderly
Ambitious	Accurate	Optimistic
Did the applicant impress you as being well-bred?.....		
How old did the applicant appear to you?.....		
Would you like to associate with the applicant?.....		
Would you personally employ the applicant?.....		
Remarks		

Figure 82. Impression Blank

On this form the person interviewing the applicant writes down the impression made by the latter, so far as concerns his fitness for the job.

"His attitude toward the school work may have been good but naturally he will not rise to a high position. Faithfulness and a desire to succeed stand much in a man's favor, and this all shows in the record."

Finally, the back of the original application blank contains a space for a "Report of Progress" which is set down every six months. An employee may have been inexperienced or untrained for the job when he began work but, if his progress record shows that he has made steady and earnest effort to improve himself and increase his value to his employers, he is at once singled out for promotion.

The Use of Impression Blanks

A still more expansive record is kept by the Elliott-Fisher Company. Not only is an application blank used similar to the one described above, but the data are supplemented with information gathered on a separate "Impression Blank" (Figure 82). It is a rule with this company to employ no one until two and preferably three, individuals interested in the position to be filled, have interviewed the applicant and recorded their impression of his character and ability. These interviews always precede the filling out of the regular application blank and as Mr. Busch, educational director, explains, "The method weeds out the unfit."

The foregoing system illustrates the care and thoroughness which modern business organizations take in recruiting their personnel. The same systematic attention to detail is today being devoted to the training and development of employees after they are engaged.

CHAPTER XXXI

THE TRAINING AND EDUCATION OF EMPLOYEES

The Adjustment of Employee to Environment

The work of the employment department only begins when the applicant has been hired. It is then necessary to adjust him to his new environment as soon as possible, since much depends upon how he takes hold of things during the first few weeks. Little misunderstandings and difficulties that can be easily explained away, were it someone's business to do so, would prevent many early resignations and disappointments and the possible loss of otherwise promising employees.

The Clothcraft Shop of Cleveland has a follow-up system that is fairly representative of the most advanced methods in this respect. Before a new employee starts to work for the concern he has a long talk with the employment manager. In this conference are explained to him the leading rules of the company, the method of wage payment, the importance of regular work, the measures necessary to preserve health, and any special information that may fit his particular case. Then he is introduced to his instructor, who shows him his machine or work-bench and starts him on his job. At lunch he is introduced to his fellow-workers at the same table. At the close of the first day someone from the employment office meets him and in a friendly way inquires after his welfare. All this tends to establish a feeling of confidence and to put the newcomer at his ease.

For several weeks an interest is shown in the man's work and attitude toward the company to make sure that no misunderstandings arise and that the employee is acquiring the proper team spirit. Then, as soon as conditions seem to

justify it, his home surroundings are investigated and helpful suggestions offered, if necessary—of course tactfully to avoid any appearance of paternalism. When the man has been drawn into a favorable environment the next step is to widen his social intercourse. For this purpose social events are held to which the families of department employees are invited. Later when time has proven a man's worth and the bent of his abilities, special training is provided when needed.

Promotion as a Means of Organization Development

In a large office organization the promotion of employees is usually made at the discretion of the office manager or a department head. How large a part the promotion on merit may play in the development of an organization is shown by the experience of one concern. Two years ago the office personnel of the business under consideration consisted of 20 clerks. Twelve months later it had expanded into twenty departments. The engagement of efficient workers is now considered one of the most important functions of its office management.

The policy of the company is to promote its present employees, as far as possible, when vacancies occur in the various departments. As, however, transfers from one department to another must obviously create vacancies somewhere, it is frequently necessary to consult the files for the purpose of selecting employees from outside. Since more than 100 persons apply for situations daily, the work of interviewing applicants has to be thoroughly organized. As the applications are received they are filed in alphabetical order and cross-indexed by positions, depending upon the applicant's experience. Appended to each application is a personal analysis as set down by the interviewer. When an applicant is favorably considered for a position, the references of former employers and others, are carefully looked into.

Simple Tests as to Education

Assuming that the references of a suitable candidate are approved, he or she is subjected to preliminary tests; stenographers, for example, are given a set of questions covering elementary subjects, to disclose any deficiency in their education, and in the use of the typewriter.

Simple written tests in penmanship, arithmetic, spelling, geography, and composition cover the candidate's general education, while another, brief test supervised by the head stenographer, enables her to form a pretty accurate judgment as to a girl's typewriting ability. These tests furnish answers to the following questions, covering the subjects as indicated.

1. Can the applicant punctuate?
2. Can she spell?
3. Does she know the rules of capitalization?
4. Rapid at typing?
5. Rapid in taking dictation?
6. Familiar with mechanism of typewriter or dictating machine?
7. Can she do the statistical work?
8. Orderly and prompt?

Tests as to Fitness for Particular Position

The applicant is next given a more elaborate test designed to determine fitness for a particular position. If, for example, a vacancy is to be filled in the correspondence department, applicants must answer satisfactorily a set of questions designed to reveal their knowledge of grammar and the syllabifying, spelling, and comprehension of words; after passing the tests they are then given a probationary trial. Examples illustrating the character of the tests given are as follows:

1. Syllabify the following words:—

commissions	depositors
expiration	departmental
correspondence	securities
accumulation	corporation
opportunities	performance

2. Make the necessary corrections in the spelling of these words:—

ballance	executer
elligible	guarante
facilaty	managment
accompanying	interst
acknowlege	institusion

3. Give definitions of the following words in one short sentence:—

scorch	service
quake	remittance
ramble	stationary
nerve	tolerate
peculiarity	lecture

4. Give differences between these words:—

laziness and idleness
poverty and misery
character and reputation

5. Correct any words in the sentences that may be incorrectly used, but do not make any unnecessary changes of sentences:—

- (a) I am her who you might blame for your failure to get the salary check due you.
- (b) There should be perfect understanding between you and I.
- (c) She does her work good, always doing it slowly and polite.
- (d) It is me who is speaking of your record.
- (e) Neither commission or rebate are allowed.
- (f) The cashier dropped his check book and let it lay where it was.
- (g) Do you like those kind of advertisements on banks now appearing in the newspapers?
- (h) The chief clerk's section were pleased that you proved success was yourn last month.

6. Make proper capitalization and insert the necessary quotation marks and punctuation:

- (a) Poor Richard said, tis better to spare and have them than to spend and crave; does any One doubt the wisdom of his words, Look round you today and you will see on every side examples of men who during their working years, spent their Incomes regardless of the Future and now in their declining years 'they are in sore need of those comforts' which should be the portion of the Aged. Have you thought this over if not consider the matter now!
- (b) The head clerk said the boss is gone.
- (c) Don't bother me said Mary the girl next door.

7. A letter written without paragraphs, punctuation, spacing, or in any way conforming to the rules of correct letter form, is given the candidate who is required to rewrite it with the proper corrections.

Test as to Applicant's Mental Ability

The above tests give the employment manager a good idea of the candidate's ability as a correspondent, so far as the details of the position are concerned. But it is also necessary to examine and appraise the candidate's mental ability, i.e., memory, concentration, observation, judgment, etc. To this end definite tasks are set which are covered by the following instructions given to the person in charge of the examination:

INSTRUCTOR'S GUIDE

1. Memory. Present a card to the candidate with 20 objects on it. Tell him to try to remember the objects displayed. Allow him three minutes to observe and five minutes to write down the names.

2. Concentration. Assign a page containing two columns of reading matter and ask the candidate to cross off all the a's. Take the time of each column separately (a standard time of 10 minutes is set). The time taken for the first column indicates quickness, while that for the second column indicates perseverance and endurance.

3. Observation. Give the subject one of the company's form letters and permit him to study it for five minutes. Then ask him the following questions:

- (a) How many paragraphs does it contain?
- (b) How do the margins compare in width?
- (c) What is the color of the type?
- (d) What errors were noticed?
- (e) To whom was it written?
- (f) Describe the complimentary close.

4. Judgment or Fluency of Expression. Give the subject a number of conditions involved in a transaction which he is called upon frequently to meet in his every-day work. For example, give him the conditions of an ordinary complaint and require him to answer it.

When the various memory tests have been made, the following memorandum is filled out:

FROM INSTRUCTION DEPARTMENT
TO CORRESPONDENCE SECTION

September 10, 1918

Below is given the record of the examination taken by Miss Johnson:

Test	Perfect Mark	Applicant's Mark
Memory	15%	10%
Concentration	15	12
Observation	15	13
Adjustment	5	5
Adjustment letter	10	8
Terms letter	20	17
Promotive letter	20	19
	<hr/>	<hr/>
	100%	84%

5. History reports of employees.
6. List of employees according to length of service.
7. Alphabetical list of employees with college training.
8. List of college graduates by colleges.
9. List of employees according to languages spoken.
10. List of ten best employees in each department.
11. Surety bond cards.
12. Personal analysis cards of all employees.
13. Ready reference cards.

Most of the above lists are self-explanatory, but since the "History Report" and the "Personal Analysis Card" are considered of special importance, more detailed description of them is given.

EMPLOYMENT RECORD											
Name		Street and Number				City and State		Telephone		Pay Number	Locker No.
Nationality		Day	Age Month	Year	Married	Single	Dependents	Owens Home	Rents Home		
FACTS CONCERNING PAST FOUR POSITIONS											
Month and Year You Began	Month and Year You Left	Name and Address of Employer				Position Held	Salary	Reason for Leaving			
Graduated from		Yes	No	Name of School or College		Year of Graduation	Military Experience? If so what				
Grammar School											
High School											
College											
Commenced Employment with G. T. Co.						Dept.					
Resigned		Reason									
Discharged		Reason									
Remarks											

Figure 83. Employee's History Card

On this form details are entered concerning the applicant's age, address, experience, and education.

Function of "History Report"

The history report shows the complete list of all positions held by an employee, both before and after his connection with the company. If he has been a stenographer, bookkeeper, auditor, receiving, or paying teller, his name appears under one of those five classifications as well as under the classification of his present position. This record is consulted when additional help is needed. This form is shown in Figure 83.

As an example of the utility of this record, an incident occurring in the company cited above may be described.

The chief clerk's department was called upon at the close of a business day to supply 70 stenographers to do work that had to be finished that night. Fifty-five were mustered, but all the other members of the stenographic department had left for the day. The history reports were consulted and 15 names obtained of employees who had formerly acted in the capacity of stenographers. When the situation was explained to them they readily agreed to help out in the emergency.

Functions of Personal Analysis Card

The personal analysis cards gather the complete history of each employee from year to year. His general ability and education are noted at the time of employment and any changes for the better or the contrary are recorded annually. This record is made out by the employment manager, but it is checked by both the chief clerk and his assistants. The form of this card is shown in Figure 84.

The Transfer of Employees to More Suitable Positions

To make transfers from one position to another, and to do it intelligently, presupposes a comprehensive record of the employee's activities. In the days when an office employee was expected "to hold a position for life" little need was felt

tem must be devised to regulate the flow of these changes into proper channels.

Transfers are not always made because there are vacancies. The experience of most progressive concerns is that employees, however carefully selected, are not always adapted to the job for which they have been chosen, and means must be provided for the testing of the worker's ability in another department. The Guaranty Trust Company of New York, for example, gives an employee three such opportunities to succeed before he is discharged. Since the study of an employee's special aptitude is now assuming a leading rôle in managerial policy, the reason for making a transfer in a given case should be determined and recorded. These reasons are:

1. Natural aptitude (employees fitted for particular jobs).
2. Irksome nature of work (producing restlessness in some types of men).
3. Physical unfitness.
4. Temperamental qualities (cannot get along with department heads).
5. Department heads' recommendation for discharge or transfer.

The use of records here, as in every case, arrests the tendency to adopt snap judgments, and the picking of men for positions who happen to come to the notice of "the boss," or incur the special favor of the department head. Executives are always on the lookout for employees of exceptional ability, who, in a growing concern, are advanced as rapidly as possible. But the exceptional man can, as a rule, take care of himself. The bulk of an organization is made up of men of average ability, and a careful analysis of work records must be made if the right men are to be advanced or transferred to better positions. Such a system of records brings out the

strong and weak points of both the job and the man, and provides a means of intelligent promotion.

The Promotion Problem

The problem of promotion, however, is not wholly solved by keeping work records and the like. Some large corporations, such as railroads, have been fairly successful in the creation of schemes of transfers as a means of promotion, but most businesses, especially in normal times, feel the effect of the dry rot that creeps into the organization when the movement upward is slow, or where the organization is so large that hundreds of employees are willy-nilly shoved into "dead-end" jobs. This is especially prone to happen where no effort is made to detect exceptional ability or to weed out incompetent workers who, having reached their limit, stand in the way of others. If the interest and ambition of employees are to be maintained it is generally conceded that the line of progression from one position to another should be carefully mapped out and the next step ahead indicated, so that the ambitious employee may know what he must do to prepare himself for advancement.

Job Analysis and the Promotion Problem

Job analysis is doing much to solve the promotion problem by indicating the way to utilize in one department, capable workers who may lack opportunity in another. Such an analysis is of great service in providing information by means of which employees may prepare themselves for promotion. In the report of the National Association of Corporation Schools Committee on Vocational Guidance it is stated that: "Job analysis forces business to open up channels for promotion. It almost always enables a firm to get help from within. Rarely is it necessary to go outside for skilled workmen. When requisitions come for better men the positions are

filled by moving others up. This means, in each case, a transfer really filling two positions—one, the higher vacancy and the other the position from which the promoted man is taken. By this process the outside market is relied upon only for filling the low grade positions in each case."

Building up Promotion Records

Though the promotion of employees has hitherto been largely left in the hands of department heads, the authority to make final decisions in these matters is gradually passing into the hands of the employment department. As a consequence the employment records are made out with greater care and assume a more important rôle in the filling of vacant positions and transfers; while systematic promotion is assuming a place in management policy commensurate with its importance. The classification for building up promotion records by the employment department is usually as follows:

1. Productivity
2. Evidence of native ability through daily work and suggestions
 - (a) Initiative
 - (b) Constructive
3. Mistakes and errors
4. Attendance
5. Punctuality
6. Evidence of loyalty
 - (a) Work on committees
 - (b) Attitude toward superiors
 - (c) Grasp of firm's policies

The Organization of Promotion Plans

"We are facing facts, not theories," says D. C. Buell before the Railway Club of Pittsburgh. "This man problem

in business resolves itself into a study of ways and means whereby young men of proper mentality, physique, and ambition, can be given proper opportunity to learn the business and thereby fit themselves for greater responsibilities." This implies, first, that the organization be charted from the point of view of graded promotions and positions, so classified that mastery of one leads naturally to another in the line of advancement; secondly, that systematic instruction, based on the requirements of the various jobs, be provided; and thirdly, to quote Mr. Buell again, "when men have fitted themselves for promotion they should be given a chance for the better positions in accordance with their worth and *without unreasonable delay*."

Need for Training Routine Employees

The purpose of training employees is to awaken their dormant or undeveloped powers and to increase their efficiency so as to fit them for promotion. The ambitious man who reveals the executive ability required to organize and direct the activities of others will, as a rule, assume the greater part of the burden of self-development himself. On the other hand, the routine worker with little or no executive ability needs to be developed by means of a more or less rigid system which demands results, and provides the necessary pressure to get them. Such a system includes some form of educational work or vocational training sufficiently comprehensive to cover the needs of the case. Some means must be devised to render such education and training compulsory.

Concerns are now meeting this need in a variety of ways. For example, in the teaching of English to foreigners in factories—some companies affiliate with night schools; others conduct schools during factory time; others make the work compulsory and hire foreigners only on condition that they learn English. Although in some cases it is optional, it should

not as a general rule be left to the employee to say whether he shall or shall not take the training provided for him. Industrial training is as necessary to the success of industry as political education is essential to a democratic state where education is compulsory.

Pitfalls of Educational Schemes

Training comes only as the result of energy and effort on the part of both the employer and employee and the mutual sacrifice of time. For these reasons the routine type of worker needs to be held to the educational program, while the employer must clearly define in his own mind the policy he wishes to pursue, and then prepare to meet the costs. Such a view will eliminate at least one pitfall which has proved to be the graveyard of so many educational schemes, i.e., the pitfall of expecting the employee to study and attend classes solely in his own time. A well-organized business provides work enough to consume the average employee's energy for the day. To expect him to do effective educational work at the end of such a day is to call upon the reserve power of the man, and experience has proved that it does not take long in most cases to exhaust this reserve.

Another force in the success of any educational scheme is a "fair field and no favors." Favoritism which pushes relatives or others to the front, irrespective of their merits, while it ignores those who have earned promotion by study and application to their work, will be fatal to all educational effort.

Essential Requirements of Educational Systems

The essential requirements for the successful training of employees, viz., hope of promotion, time in which to study, and freedom from favoritism, are, of course, the same as those of any educational system. But business men often lose sight of these essentials in an attempt to get substantial

results by short-cut expedients. There is no short-cut to the fruits of education any more than there is a royal road to loyalty. The big lesson for the employer to learn is that the price is high, but in the long run the results justify the cost.

Different Forms of Training Schemes

The education of employees during working hours takes on various forms. It includes office work schools, factory schools, executives' training courses, schools for training skilled and unskilled workers in the technique of their trades, classes in English and the elements of government (for foreigners), and so on. Sometimes the work is general in nature, embraces a wide field of subjects, and covers a considerable period of time. But more often the training course is confined to a particular group of employees who are instructed in certain details of operation for the successful performance of their work or duties.

Example of Complete Training Course

An example of a complete educational course which covers a period of about three years, is that adopted by many service corporations in the gas industry. The course starts with a study of those subjects which are considered common and essential to every branch of the business. From six months to one year is devoted to this preparatory work. At the end of this period the student can select a specialized course covering his particular line of work. There are five distinct courses corresponding to the main activities of the commercial end of the industry, viz.:

1. Industrial fuel and power
2. Illumination
3. General salesmanship of appliances
4. Commercial management and public relations
5. Office methods and accounting

Two years is required for the completion of each course and many employees take up more than one.

Extensiveness of Course

The completeness of the course may be judged somewhat by the time it takes, and the method and cost of its preparation. Although much of the material was furnished by men who volunteered their services, some of the subjects, which involved extensive technical knowledge, were supervised by the leading experts in their lines. It took three years to prepare this work, during which time three short courses of one year each were also prepared and taught. These served as experiments by which the real educational needs of the commercial employees of this industry were discovered.

Method of Compiling the Course

The preparation of the courses was done under the direction of a leading expert in the gas business and of a teacher who, after many conferences and lengthy investigations, submitted an outline of the educational work to be covered to a board of educational control. This board consisted of the leading commercial managers of the industry in the United States and Canada. After their suggestions had been added it was felt that a fairly representative program covering the educational needs of the gas business was being offered to the companies.

The gathering of the material, the classification of the data, the presentation of the subject matter, and the writing of the lessons, were problems which were difficult to solve satisfactorily. No one or two persons were competent to do all this work. Accordingly committees were chosen for each course and the individual members were given charge of one or more lessons in the line of work in which they had been

engaged for many years. Definite times were set for the completion of these lessons, which were first submitted in rough outline form, so that the committee as a whole could offer constructive suggestions and recommend changes. These committee meetings frequently lasted from one to two days and were well attended. After one lesson was fully covered it was turned over to the educational director to be rewritten from the point of view of its logical place in the educational scheme, as a whole, so as to tie up with the lesson that had gone before and the one to follow and to give it an effective pedagogical swing and non-technical literary slant.

Cost of Compilation

The promotion of this work together with the outlays for printing and clerical help ran to over \$50,000, and this did not include the time and work of the committees, many of the members of which—all high salaried men—traveled long distances each month or oftener to attend meetings.

From the above it will be seen that an ambitious educational scheme is a costly procedure. It often entails the allotment of valuable space and the purchase of costly equipment. The cost of preparing and maintaining a course, together with the expense of employing an adequate staff of teachers, mounts up rapidly. Yet progressive business men regard all such educational efforts as a worth-while means to an end—increasing the value of their employees to the business.

General Methods of Instruction

It will not be necessary to describe in detail the methods of teaching these subjects as carried on by various gas companies. Some put the whole responsibility on the individual employee who enrolls in the course, pays the price of instruction, and sends his answers to the educational headquarters in New York for grading and criticism. Other companies

furnish local teachers and supplement the general course with class lectures and guidance. Others again have adapted the general course to local conditions and have built around it a series of special lectures, quizzes, and class instruction under the direction of an educational director and a corps of instructors.

Training for the Scientific Job

While the scheme described above is devised to train men from the point of view of both "organization fitness" and "job fitness" some concerns lay stress only on the latter. The training of men to see the value of their individual work to their department and of their department to the business as a whole, is the more difficult educational undertaking. Since, however, a quick improvement in efficiency is as a rule the result of training employees to master their daily work, it is the course most generally followed.

A large mail-order house which adopted an ambitious educational program with this end in view, finds that the outlay in time and trouble is repaid in results many times over. This concern now employs twelve instructors who devote their entire time to the training of employees in their specific jobs. An entire floor has been set aside for the work and employees are divided into the three following classes: (1) new employees; (2) employees who need further training in their present work; (3) employees training for higher positions. Classes are held from time to time in 21 subjects, among which are:

1. Ready-made order writing
2. Made-to-measure order writing
3. Complaint adjusting
4. Correspondence

5. Business letter-writing
6. Mail examining
7. Filing
8. Time-keeping
9. Use of phonograph
10. Typewriting
11. House systems, e. g., showing the general system of organization of the house and its leading policies. The course of an order is followed from the time it is received until the time the goods are shipped.
12. Penmanship, etc.

The classes for new employees are in session from three to four weeks each. About half the time is spent in the departments themselves, examining routine methods, forms, etc., and the other half is given over to classroom discussions of principles underlying methods and procedure. Constant quizzing of students determines the degree of progress made in grasping what has been explained to them. Text-books describing and explaining the work in detail are used as a basis of all instruction and final examinations furnish a means of judging the fitness of the student for employment. The passing mark is 70 out of a possible 100. As a rule, this method weeds out the incompetent and unsuitable applicants, who drop out in the preliminary tests. If for any reason, a student, after his selection, shows that he is still inefficient, discharge is not the only alternative. He may be returned to the school for further instruction.

Attitude of Employment Department Toward Educational Schemes

The employment manager is in a position to aid the educational scheme by furnishing suggestions and business information that can be used in the instruction of students. His interest in educational matters should not be limited to the

work of his own organization. He should be in close touch with every educational movement in his city or vicinity, acting as counselor and guide, wherever possible.

Education is a continuous process and the need of the day is a closer articulation of the educational processes as broadly carried on in the schools, and later developed along the specialized lines of a business organization. How great is the progress in this direction is shown by the recent development of co-operative schemes of education between various business interests, such as engineering industries, department stores, etc., and different colleges and high schools. The problem of vocational guidance today is the clear understanding of the training the employee needs for his life work, and mobilizing the educational forces to meet this need should be one of the leading functions of the employment department.

CHAPTER XXXII

ORGANIZATION OF AN OFFICE TRAINING SCHOOL

Advantages of Training Schools

The results obtained from an industrial or office work training school depends much upon the scope of the plan adopted. The plan may embrace courses on general subjects or be limited to office work alone.*

The benefits to be derived from a school system, when competently conducted under the supervision of a large concern, may be briefly stated thus:

1. Reduction of errors. The clerk is trained and must become proficient before he is placed upon the pay-roll. Costly errors committed by green help are in this way largely eliminated.

2. Reduction in cost of training. The work of education is in the hands of those who are trained to instruct, thereby permitting the producing force to devote its entire time to actual work.

3. Elimination of useless motions in the routine processes. It is necessary for the instructors to study and analyze carefully every detail of the office routine. Such analysis

*Emerson says: "The truest test of civilization is not the census, not the size of the cities, not the crops, but the kind of man the country turns out."

"The truest test of an office work school is not the accuracy of the files, not the speed with which the work is done, but the state of development its pupils reach. The ideals of an office work school should be:

- "1. To inspire ambition and a wholesome respect for honest work.

- "2. To mould the character, habits, and principles of the young people new in the business world.

- "3. To help and develop business thinking; to build a foundation for specific office work; to instill a regard for system; and to cultivate a habit of attention to details, thus improving the efficiency of the business.

- "4. To teach principles which will make better men and women for the future."

—From Report of Committee on Office Work Schools, National Association of Corporation Schools, 1916.

almost always reveals methods in use that can easily be improved.

4. Standardization. All employees are taught to do a certain thing in the correct way, when once the right method has been determined.

5. Training of understudies. Employees are prepared for other positions thus producing a supply of understudies for practically every position in the office.

6. Loyalty. By taking the employee in hand at the beginning and instilling in him an earnest regard for the ideals and policies of the house, much of the petty antagonism toward the management, so often found in business establishments, is avoided.

The Department School Method of Office Training

One of the simplest methods of instructing employees in the routine of office work is to form a "school department." One of the departments of the business is organized solely for purposes of instruction and made responsible for handling the office work in connection with the business done in a particular territory. The Larkin Company of Buffalo, for example, has allotted the state of Indiana for this purpose and all orders from this section are turned into the school department. One advantage of this method, according to Mr. Puffer, the educational director, is that the management and the employees soon look upon the school as a producing factor of the business and not merely as an overhead expense.

Under this plan the student-employee spends all his time in school until he is pronounced fit to be transferred to the regular office. On the whole the school plan has many advantages. It isolates the new employee from the main office, with its responsibilities, until he has grown used to the routine and the daily discipline of the office. It weeds out the incompetent and incurably careless applicant, before he is taken into

the organization and thus reduces the labor turnover, and it also enables the company to instruct its future employee in many things regarding its policy, rules, and ideals—instruction which could not be conveniently given in a regular department of the business.

In the department school the work is so arranged that the future employee passes from one duty to another in their order of difficulty. He thus acquires a broader knowledge of the business routine than could be acquired in a regular department where change of work generally depends upon promotion.

The Class Method of Office Training

Another and equally simple method of office training, particularly adaptable to the small office, is to form classes which may vary in size from half a dozen to forty members or more. Such classes have been organized by the National City Bank, the Alexander Hamilton Institute, the Winchester Arms Company, the National Cash Register Company, the Sherwin-Williams Paint Company, and many others.

One group may be made up of employees from the lower executive grades who are desirous of following some regular prescribed course of reading in connection with various branches of the business. Another may consist of employees handling the routine office work, such as correspondence, filing, and the like. The value of this method lies in the concentration of attention and effort upon specific conditions and subjects, whereby the more mature and older employees are trained for higher positions, and the inexperienced are taught how to master the immediate problems before them.

The Selection of Competent Instructors

One of the first difficulties encountered in the organization of any office educational scheme is that of securing trained

teachers. Every business that tries to develop a comprehensive educational policy, sooner or later discovers that it lacks a very important essential, i.e., someone who is really competent to do the teaching. As a consequence, the whole plan is often thrown out of gear and activity is halted until the directing force can be supplied. Much time, effort, and discouragement would be saved if, at the beginning, the important part played by the teachers was appreciated. A competent instructor cannot be developed over night, nor is he often found ready made, either within or without the business organization.

In selecting an instructor two courses are open: (1) the trained teacher may be brought into the office and given an opportunity to study the conditions preparatory to the organization of classes; or (2) clerks who know the business may be selected and trained to teach the others. A disadvantage of the last method is that the good salesman, department head, or prize stenographer is seldom conscious of any particular method in his work and he cannot readily analyze the reasons why, or how, he does it in a certain way. In consequence he is rarely able to impart his knowledge to others. On the other hand, trained teachers with academic experience seldom know the details of a particular business and comparatively few have even thought of business as a field rich in pedagogical possibilities. Though the training of a teacher may fit him to instruct others, it takes time for him to master the ins and outs of business and to discover the underlying principles which must form the backbone of any educational course. However, the method most generally followed is that of selecting a teacher of tested and proved ability and training him in the details of the business. The most important assets of the teacher are:*

*From Report of Committee on Office Work Schools, National Association of Corporation Schools, 1916.

1. Experience and training.
2. Ability—first and foremost ability to impart knowledge to others; capacity to retain a perspective of the entire subject and handle details successfully.
3. Personality—strength of character, courtesy, sympathy, enthusiasm.

Lack of observation of these points, among others, has been the rock on which the pioneers in this movement nearly grounded.

The Responsibility of the Instructor for Results

The person in charge of the educational work has a greater responsibility, when measured by results, than that of any department chief. He should, therefore, be a man capable of getting things done with the least friction; this simply means he should be a good executive, possessed of tact, judgment, and a pleasing personality, and in addition be able to grasp and hold the idea of the bearing of his work on the business. Unlike instructors in a public school, his work must bear fruit in the form of the greater efficiency of employees within a reasonably short time, and in such a way as to show up favorably on the balance sheet. He cannot explain away his failure to produce definite results by saying that the effects of his teaching will show in the "better lives of his students." The business man's creed is based solely on "justification by works." The employer has the ordinary citizen's desire to see his employees benefit personally by their instruction, and he is willing to help them gain a wholesome respect for honest work, as well as an intelligent comprehension of their duties as citizens; but he is not working to produce these results without first considering the bearing of the educational activities upon the success of his business. The work of the educational director, therefore, must stand or fall by comparison

with standards of attainment set up by business men who have a very definite idea of what they want in terms of profits.

The Instructor's Duties

The instructor's duties will naturally depend upon the educational requirements of the business. In addition to being in charge of the general scheme of instructions, his work should enable him to offer valuable suggestions relating to the engagement and training of new employees, and his opinion should be consulted when employees are promoted or transferred to other departments or when there is any question of their discharge. His advice should also be sought for the improvement of the existing system and methods of operation. Finally he should be in charge of the office or department manuals.

The Organization of Classes

Having decided what is to be taught and who is to teach it, the next step is a preliminary investigation to determine the best method of organizing classes. This should include:

1. The classification of prospective students to show whether conditions warrant the formation of a class in any particular branch.
2. The determination of the number of students in each class.
3. A study of working conditions to determine the time of day when classes can be held with greatest convenience, giving due consideration to the employee's working powers.
4. The length of the sessions.
5. The length of the course.

With these preliminary details settled, arrangements can be made to begin operations. These arrangements usually,

result in a compromise between what might be the best procedure, and the demands of the departments whose daily work must go on with as little interruption as possible.

Organization of Classroom Work

When the foregoing details have been adjusted to the satisfaction of all concerned, the following points bearing upon efficient operation should be discussed, and a decision reached in each case :

- I. Classroom methods :
 - (a) Relations between director and teachers—responsibility for changes in instruction to meet changes in office procedure or systems.
 - (b) Standardization of procedure during recitation and study periods.
 - (c) Standardization of lesson sheets, ratings, reports, etc.
 - (d) Special lecture work, demonstrations, etc.
2. Obtaining supplies and their distribution to classrooms.
3. Library rules.
4. Adjusting the school work to departmental activities :
 - (a) Arrangements with departments by which visits to them by individual students can be made with the least inconvenience and disturbance.
 - (b) Arrangements with departments whereby students or "school graduates" working in the office may be followed up by progress reports made out by the senior clerk, or other person in authority.

- (c) Arrangements whereby all persons in the office may be brought to the classrooms, if necessary, to acquaint them with important changes in the system or policy of the office work.

The Office Manual as a Vehicle of Instruction

A school organization of very much smaller proportions than the one outlined above would answer the requirements of most mercantile businesses. When the services of an instructor cannot be economically arranged for it is sufficient, perhaps, to employ the office manual as the vehicle of instruction. This little book, if care and forethought are used in its composition, can be made to serve as a means of acquainting employees with the rules and regulations of the concern, of instructing them in their duties, and as a book of reference to which all can turn when in doubt as to any detail of office routine or procedure. Where an office manual is in existence the problem of training is very much simplified. The field which it can be made to cover will be more readily seen perhaps, if the conditions, as they exist in the ordinary office, are recalled.

When a new employee enters an organization somebody must spend the necessary time to explain the nature of the work to the recruit. This explanation is of necessity very imperfect, for it is impossible to bear in mind all the details which the new worker must be taught, nor can he grasp at one session the full bearing of everything that is said to him, let alone remember it all. The new employee is quickly thrown entirely upon his own resources, with the result that, in the majority of cases, the errors and mistakes of ignorance creep in before the new cog fits into the machine. Here is where the office manual helps the new employee. He can read it at his leisure, consult it when necessary, and be sure of

finding therein all the information required to guide him in his work.

When the number of new employees warrant the course, regular classroom instruction may be given by a teacher who, using the manual as a text-book, will follow the usual method of question and answer until convinced that the students have a fair knowledge of the duties they will be called upon to perform. (See Chapter XLII for further treatment of office manuals.)

Organizing Class Work for a Small Number of New Employees

In one organization, where the number of employees does not permit of regular class work on a large scale, the problem of breaking in the new employee has been solved by assigning the task to one of the older women employees. Her work is so arranged that she is free to devote part of her time to instructing beginners in their duties. The following outline is carried out :

First day :

1. Popular presentation of the history of the company, and an outline of the work, laying particular stress upon the ideals of the organization as expressed in its method of service.
2. Character sketches of the officers who are directing the work of the company (illustrated by pictures).
3. Explanation of the opportunities afforded by the work and of the importance of the job to the company.
4. A visit to the various departments, during which objects of interest are pointed out, especially those things which are directly connected with employee's future work.

Second day :

1. A careful presentation of the functions of the department into which the employee is to enter.
2. A detailed explanation of the particular job to be allotted to an employee. Questions are permitted from, and also put to, the candidate. In this way it is known whether the points are grasped or not.

Third day :

1. Summary of salient features, showing the opportunities of advancement with the company.
2. Inspirational talk on the various social activities of the employees, and an impressive presentation of the welfare work, laying particular stress on the thoughtfulness of the company for its people and the consideration it expects in return.
3. Introduction of employee to all co-workers in his department.

By such means as these the new employee is impressed with the responsibilities of his work, confidence is inspired, and a feeling of pride is engendered by his connection with the concern.

Department Store Training

A modern department store is the most complex of all mercantile businesses and in consequence every progressive enterprise of this kind finds it necessary to inaugurate some sort of training scheme for the development of the right kind of personnel. Training in such an institution must be many angled to cover the complexities of the business into which it is introduced. Department stores in comparatively small centers of population find it advantageous to supplement the general school education of their employees in different ways, while the training school of the big city enterprise has a scope

which rivals that of the public and business schools. To illustrate the work which is being done in this direction a description is given of the methods of R. H. Macy and Company of New York whose school is under the direction of A. S. Donaldson, superintendent of training.

Pre-employment Tests

In order to establish a minimum standard of education for those entering the employ of the company, it has been found necessary to give tests for mentality, involving simple problems in arithmetic and questions for the purpose of testing the ability to use the oral and written word. In addition to mentality tests, tests for vision are required of the following classes of applicants:

1. Section managers
2. Stenographers
3. Comptometer operators
4. Dictating machine operators
5. Typists
6. Receiving clerks
7. Entry clerks
8. Merchandise checkers
9. Merchandise markers
10. Cashiers
11. Sales clerks
12. Drivers
13. Wagon boys
14. General clerical workers
15. All juniors

Tests for color are required only of those who apply for work in departments where the recognition and matching of colors is essential.

The next and last test which the applicant must undergo is

the physical test, which is given about two weeks after employment. Applicants are rated as good risks, fair risks, and poor risks. Poor risks are not retained. Fair risks are given medical attention with the purpose of improving their condition.

Mentality tests vary slightly in accordance with the work which is to be undertaken. For instance, the test in general dexterity, exacted of a comptometer operator, is similar to that exacted of a typist, as both classes of work require the ability to copy rapidly through the touch system. However, these two classes of work differ in general knowledge; the former involves a knowledge of figure combinations while the latter involves a knowledge of letter combinations.

Tests should be carefully applied to each class of applicant. Even in the case of the same class of applicants, different tests should be administered, if necessary. For instance, the test in arithmetic for a sales clerk in a yard goods department should be more difficult than the test required of a sales clerk in a cloak and suit department where fractions and decimals will rarely be met with. On the other hand, in the cloak and suit department the ability to express thoughts fluently is more essential. In other words, the same test should not be given for different grades of the same work.

As a result of these tests, it is possible to install training classes to develop employees from a fixed minimum standard of education to a higher standard. Were tests not administered, there would be no means of knowing where training should begin, as the general education of employees might vary from a very low standard to one which is desirable. Under the test system only the desirable applicants are employed. The employment manager after carefully examining the applicant for general appearance, suitability for the position, and recommendations, sends the applicant to the department of training for mentality, vision, and other tests. In

case the applicant fails to pass the tests, although the recommendations are satisfactory, he is rejected. Failure to pass the vision test means that the applicant is rejected until his vision is made normal by the use of suitable glasses. In case the applicant's vision is beyond adjustment to normal, the test is final.

Preparatory School

The primary school of the company is its continuation school where a fundamental knowledge of arithmetic, spelling, reading, local geography, and hygiene is given. These subjects are presented in a manner which shows their applicability to business.

This school is located half a block from the store. Here students of both sexes from fifteen to twenty years of age spend two hours each morning from nine to eleven o'clock, except on Mondays. The duration of the course is three and one-half months, giving each student about 150 hours of instruction. The time allowed for study, namely two hours each morning, is not charged against the students' salaries. In other words, the training is given in store time and at store expense.

This course includes several bus trips about town to give the students a working idea of the city; also it includes talks by store executives and instructors on current political and business subjects.

Graduation exercises are held at the completion of the course, when diplomas, class pins, and prizes for exceptional standing are awarded by members of the board of education and store officials. After graduation these students are urged to join the alumni association of the continuation school which holds business meetings and recreational activities the first Saturday night in each month. These meetings tend to stimulate a desire for further study and to bind the graduates closer in the friendships formed at the school.

Training School

The continuation school acts as a feeder to the various branches of training. The graduates of this school and others who have had an equivalent education are allowed to decide for themselves whether they are to become sales clerks or office workers.

To those who choose retail selling, very carefully planned courses are offered, by a junior training class, in salesmanship, store organization, store system, color, diction, advance arithmetic, display, store directory, personal hygiene, and demonstration sales. At the completion of this course, an opportunity is offered the students to choose either textile selling or non-textile selling. To cover these two divisions of retail selling, there is a senior training class in textiles and a senior training class in non-textiles. These courses include trips to mills.

Graduation from these classes is followed by the formation of clubs, organized for the purpose of further study along specialized lines. The graduates have at their disposal a technical library and instructors who continually follow up their work on the selling floors. Advanced instruction is offered to those who show ability, interest, and initiative. Such employees finally become heads of stock, assistant buyers, buyers, and merchandise managers.

To those who choose office work the following training is offered:

1. Comptometry
2. Dictating machine operation
3. Bureau of investigation tracing
4. Receiving clerk's work
5. Entry clerk's work
6. General clerical work (filing, sorting, checking, etc.)

Course in Comptometry

Employees desiring to take up comptometry must first pass a rather difficult test in arithmetic, dealing especially with fractions, decimals, denominate numbers, percentage, and interest. As numbers cannot be handled in fractional form on the comptometer, the operator must be able to write fractions in terms of decimals without hesitancy. In case the applicant fails to pass this test and still is considered eligible for the work, he is given the opportunity to coach with an instructor in this subject until able to take the test successfully. Classes in comptometry are held every afternoon from 3:45 P.M. until 4:45 P.M., under the instruction of an experienced operator who is well fitted for this work because of her ability to impart knowledge. Comptometry as applied to department store work, not only involves the ability to operate the machine, but also involves the ability to handle the sales checks and other forms at the same time. This course continues throughout the year. Those students who have shown themselves proficient graduate, while those who need more time continue to study and practice. It usually takes three months to train a fair operator. As promotion depends on the skill shown in the classroom, students are anxious to become proficient.

Training for Dictating Machines

Employees who are to operate dictating machines must take a test in typing. Up to the present time the department of training has not seen fit to give courses in typing. Arrangements with public schools and other schools are made for the training of those employees who desire to follow this line of work. It is the department's policy never to duplicate the work of the evening schools, except where absolutely necessary. The operation of the machine is merely a matter of practice, once the student is a good typist. Training in

this work is given by the supervisor of correspondence at suitable hours during the day.

Training for Position of Tracer

Employees desiring to become bureau of investigation tracers are offered a course including store system, store directory, and store policy, as required in good complaint tracing. After a two weeks' course in the above mentioned subjects the students are assigned to skilful tracers, who give them a practical idea of the work. Students continue to work under supervision until they show that they are able to work on their own initiative. Tracing requires an analytical mind and a very thorough knowledge of the subjects taught.

Training of Receiving Clerks

Employees desiring to become receiving clerks must first of all have or learn to have a very legible handwriting. The course offered consists in teaching the applicant the use of the various forms to be met with in his work. He must learn to read railroad and express documents and manufacturers' invoices intelligently, so that a proper record may be made of all articles received in the store. He also must know where to send each article in case the department numbers and other necessary information are omitted on the invoices. This requires an accurate knowledge of the store directory. In addition to this, a course in denominate numbers is very essential. After a few days of this training, depending on the rapidity with which the applicant grasps the work, he is sent to the receiving platform where he works under the supervision of an instructor who teaches him the numerous details involved.

Training of Entry Clerks

Employees desiring to become entry clerks must have or learn to have a very legible handwriting. The course offered

consists in teaching the applicant to read intelligently the different kinds of address tickets on all the packages leaving the store through the delivery department, in order to make a proper record of them. This involves a limited knowledge of store system and a thorough knowledge of delivery rules and regulations. After a short period of training in these subjects in conjunction with actual packages and forms, the applicant is sent to the delivery department where he works under the supervision of an instructor until he becomes thoroughly familiar with the details of the work.

Training for General Clerical Work

Employees desiring to do general clerical work, where no special amount of skill in any line is necessary except the skill acquired by practice, are put to work with an employee who is thoroughly acquainted with the work and who is able to instruct the beginner without allowing bad habits to develop. Under the heading "General Clerical Work" come filing and sorting. In this work special instruction is given by the supervisor of correspondence.

In addition to the above there are many other branches of specialized training for such positions as section managers, drivers, wagon boys, elevator men and women, lens grinders, stationery stampers, furniture polishers, etc.

It is the policy of the company to promote its employees to the higher positions which become vacant, and to fill the lowest vacancies caused by such advancement by employing young men and women without special training. It is this policy that makes training an essential.

CHAPTER XXXIII

OUTLINING A COURSE OF STUDY

Using Well-Known Courses vs. Own Study Outlines

One of the chief difficulties in the organization of an office training school, is to determine the course of study for a particular department. If students are to prepare their lessons without any special guidance, except perhaps that of a class leader chosen from among the department heads themselves, it is well to select some of the well-known courses on business organization. With the wealth of business literature produced during the last decade to draw from, there is little excuse in these days for ignorance of business methods and organization. If, on the other hand, a more specialized or technical course of training is desired, it may be necessary to outline this in detail and with a view to the requirements of the department concerned.

Outline of Course for Correspondence Department

As an aid to the formation of such a course, the following outline, which is based on the needs of the correspondence department, is suggested. It has the sanction of a number of leading office managers of this country and, modified to suit local conditions, is used in many large offices.

OUTLINE OF COURSE FOR CORRESPONDENCE DEPARTMENT

- I. RELATION OF CORRESPONDENCE DEPARTMENT'S WORK TO BUSINESS POLICY:
 1. Every letter a sales letter.
 2. Describe the house attitude to customers—promptness, guarantees, sincerity, etc.

3. "You are the company."
4. "The customer is the boss."

II. COMPANY ORGANIZATION:

1. Charted functions.
2. Course of an order.
3. Special department organization and allied department relations (bird's-eye view).
 - (a) Mail received, sorted, distributed.
 - (b) Mail classification symbols:

"I"	means	"Inquiry"
"C"	"	"Complaint"
"R"	"	"Reply"
"T"	"	"Tickler," etc.
 - (c) Special systems of handling correspondence.*
 - (d) Filing system
 - (e) Dictation department
 - (f) Stenographic department

III. GENERAL INFORMATION

1. Catalogue, etc., showing kind of information it contains; for example, retail house shows:
 - (a) Kind of merchandise handled.
 - (b) Condition of sale, terms, special guarantees, etc.
 - (c) Directions to customers when sending orders.
 - (d) Order blank (terms explained).
2. Guide for correspondents (synopsis of technical terms and tables to assist correspondents in giving correct information in their letters):
 - (a) Weights and measures.
 - (b) Colors.
 - (c) Materials, etc.
 - (d) Standard list of words always capitalized.
 - (e) " " " " " hyphenated.

*As an example of a special system we quote John F. Tinsley, of the Crompton and Knowles Loom Works, Worcester, Mass: "Correspondence systems, to be effective, should force an automatic response from the recipient. Our system provides for every letter written by a member of the house. The original and one carbon is delivered to the writer, who, after signing or initialing the original, marks the copy at the top with the letter 'F,' 'R,' or 'T,' indicating to 'File,' 'Reply,' 'Tickler.'"

"Copies marked 'F' go into file at once, for it says to the file clerk, 'The correspondence is complete. No answer expected.' If a prompt answer is desired, the letter 'R' is used. Such copies are kept by themselves, unfiled, to be gone over several times a week, or every day if necessary, to see what new steps are to be taken in eliciting a reply without further delay. The letter 'T' is used generally, with an advanced date, on such letters as require investigation or other time-consuming factors."

3. Dictating machine operators:

- (a) Operation of dictating machine
- (b) Guides to dictation:
 - (1) Speak directly into mouth-piece.
 - (2) Enunciate clearly (r, s, and t especially).
 - (3) Begin sentences slowly.
 - (4) Never use recorder as producer, etc.

IV. THE ESSENTIALS OF BUSINESS LETTER-WRITING*

1. Thorough understanding of subject matter to go into the letter:
 - (a) The letter to be answered.
 - (b) The goods to be ordered, etc.
2. Avoidance of stereotyped phrases; for example:
 - "Trusting that we may have the pleasure, we remain."
 - "Regretting our inability, we remain."
 - "Thanking you for prompt attention, we remain."
 - "Your order of recent date received and contents noted," etc.
3. Avoidance of stilted or affected phraseology; for example:
 - "It is not our desire that you hold this shipment, but on the contrary a direct antithesis of the case is desired."
 - "We hope you have not been greatly inconvenienced by this inadvertence."
4. Elimination of useless words; for example, "We regret *to inform you* that your order has been delayed."
5. Importance of word values; for example, "Our letter endeavored to outline a course by which your need could be met, but it is evident that our letter has been somewhat *confused* by you."
6. Extravagant terms to be avoided; for example, "We wish to acknowledge the receipt of your esteemed communication."
7. Arrangement of facts.
8. Paragraph structure.
9. Proper use of punctuation.
10. Analysis and criticism of sample letters. (The numbers refer to the lessons which may be devoted to each subject.)
 - No. 1. For words and phraseology.
 - No. 2. For naturalness and adaptability to the end in view.
 - No. 3. For courtesy.
 - No. 4. Sales qualities (impressing customer that the company has his best interests at heart)
 - No. 5. Conciseness, correctness, positiveness.
 - Nos. 6, 7. The tone of the house as applied to sales and orders, complaints, and credits and collections.

*See also Chapter XXXIV.

Nos. 8, 9, 10, 11, 12. The technique of business and special rules which the company insists on.

V. STUDY OF FOLLOW-UP SYSTEM

1. When original letter is quoted in the follow-up.
2. Corrections when mistakes are made in original, etc.
3. Symbols—tickler system used, etc.

VI. LETTER INSPECTION

1. By correspondent.
2. By proof-readers.
3. Types of errors:
 - (a) Policy, adjustment, expression, grammar, etc.
 - (b) Importance of inspection (do not make same mistake twice).
4. Completeness, accuracy, and neatness of letters.

VII. RESPONSIBILITY OF DICTATOR FOR PUNCTUATION AND PARAGRAPHING OF LETTERS.

1. Stenographers may change force and sense of letters by incorrect punctuation.
2. Rules to be observed in dictation; instructions to stenographers or dictating machine operator.
3. Preparation for dictator:
 - (a) Read letters carefully
 - (b) Customers' characteristics studied.
 - (c) Reference to style book or information schedule.
4. Arrangement of facts:
 - (a) Favorable impression made by putting interesting and important things first.
 - (b) Secondary points in order of relative importance.
 - (c) Paragraphs arranged with some attention to the balanced appearance of the typewritten page are desirable.

VIII. FORM LETTERS

1. Nature and importance.
2. Samples of types based on requests from customers:
 - (a) When the company can comply with request—appropriate paragraph; for example, "It was a pleasure to receive your request for samples and the enclosed assortment has been selected with special care."
 - (b) Requests for unusually large assortments and company cannot comply by sending entire assortment but only a

few samples to give general ideas of quality, etc.; for example, "These samples will give you a general idea of our goods and their values. If you will tell us what kind of goods you are most interested in, we shall be pleased to make a special selection for you."

- (c) Cannot comply with the request; for example, "We are unable to send samples of the trimmings used in our ready-made garments. However, if you have ever seen one of our garments you know something about the careful attention given to trimmings—that they are always artistic and of the finest quality. We never use any that do not harmonize perfectly, both in color and texture, with the material in the garment."

IX. ADJUSTMENT MAIL

1. Complaints of unsatisfactory service, etc.
 2. Adjustment made by correspondent or adjuster from record of the order.
 3. Form letters (cases of frequent occurrence).
 4. Giving customers benefit of doubt.
 5. Adjustment and resales.
 6. No adjustment refused without good reason.
- X. For two or three weeks the letters of new correspondents are sent to the correspondence critic for examination before being sent to customers. Thus, mistakes in dictation are caught before they become a habit.

Outside Aids for Correspondent's Course

In the above outline no attempt has been made to cover instruction in the principles of English composition. These essentials can be obtained from a number of good text-books. How E. P. Cramer, the correspondence critic of the Goodyear Tire and Rubber Company, fitted one of these books into his course illustrates what can be done in this way: "We picked out a correspondence manual containing the principles of good business English. We divided its paragraphs into twelve groups, each of which formed the basis of one lesson. Then from our own business we picked the specific letter-

writing problems to which the mapped-out paragraphs applied and prepared lessons."

It is also interesting and instructive to see how Mr. Cramer keeps in touch with the correspondents and maintains their interest in the work: "Of course, there are many ways in which we keep the course, as well as criticism of the service, before the attention of our employees. In our *Family Newspaper* we publish a quarter page ad of the course in each issue. This serves not only to enroll new students, but to keep interested those who are already enrolled. We also run articles containing some particularly good bit of correspondence work by some employee or else a digest of some of the more interesting criticisms made during the current month. Still more important, we keep reminding the branch and district managers of the course and of the criticism service. We secure their co-operation also in keeping the employees interested."

A Course for Stenographers and Typists

Just where the work of stenographers and typists begins and that of the correspondent leaves off is difficult to determine. It is much the same problem as distinguishing between thinking and doing. "Do I have to think?" asked a stenographer who had been promised a position at \$15 a week. "What has that to do with it?" queried the office manager. "Well, if I have to think, I want \$18." In outlining a course of instruction each manager must decide how much responsibility he is going to put upon the stenographer in the way of "thinking." A semblance of efficiency may be obtained by laying down rules of procedure about the use of stationery, paragraphs, and margins; but if some means is not employed to stimulate thought and the exercise of judgment on the part of employees, then provision must be made for the careful inspection to prevent costly blunders and mistakes. If a

course is outlined with a broad conception of the stenographer's duties and responsibilities in mind, much of the work also outlined for the correspondents can be adapted to the training of stenographers. In addition, however, it will be necessary to cover any special stenographic fields such as the necessity of correct form, arrangement, etc.

OUTLINE OF COURSE FOR STENOGRAPHIC, DICTATING MACHINE, AND TYPING DEPARTMENTS

I. GENERAL CONSIDERATIONS

1. Importance of appearance of letters; "first" impression:
 - (a) Neatness.
 - (b) Arrangement.
 - (c) Expression.
2. Attitude toward work:
 - (a) General knowledge of correspondence manual.
 - (b) General business knowledge.
 - (c) General knowledge of house practice and policies.
 - (d) Goods.
 - (e) Sales methods.
 - (f) Organization and policies:
 - (1) Order filling.
 - (2) Inquiries and adjustments (how handled).
3. Care of machines: typewriters, phonographs, etc.
4. Departmental records:
 - (a) Rule book.
 - (b) Time sheets.

II. SPECIFIC INFORMATION—ALL THREE DEPARTMENTS

1. Stationery; special instructions about kinds and uses of company stationery:
 - (a) Letter-heads and mailing envelopes:
 - (1) Imprints.
 - (2) Sizes.
 - (b) Return envelopes (kinds):
 - (1) When used.
 - (2) How used.
 - (3) Enclosures: order blanks, circular materials, etc.

2. Interpretation of dictation:
 - (a) Correspondents' responsibilities (dates, paragraphing, etc.)
 - (b) Confirmation slip (dictator takes responsibility for letter punctuation, etc.).
3. Carbon copies:
 - (a) Use and economies
 - (b) Number.
 - (c) Distribution:
 - (1) Dictators.
 - (2) Files.
 - (3) Color uses.
 - (d) Qualities of carbon papers.
 - (e) Instructions for pinning carbons and papers to the originals.
4. Typing details in letters:
 - (a) Order of answering:
 - (1) Remittance.
 - (2) Refunds.
 - (3) According to time received.
 - (b) Dating:
 - (1) Position.
 - (2) Characters used (numerals or written out).
 - (3) When to change date on a single day's dictation;
for example, letters transcribed up to 4 P.M. to
be given the date of transcription; after 4 P.M.
to be dated as of the day following.
5. Name and address:
 - (a) Beginning or end of letters.
 - (b) Give form used.
6. Estimating length of letters:
 - (a) Short, medium, or full page.
 - (b) Relation of size to form of arrangement.
7. Solution:
 - (a) Explanation of kinds.
 - (b) Reasons for their use (relation of writer and recipient);
establishing the "letter tone":
 - (1) Friendly.
 - (2) Impersonal.
 - (3) Combative.

Note: Show that for these reasons the salutation is not merely a useless form left over from the age of business chivalry.

- (c) Indentation rules:
 - (1) Width of letter-head.
 - (2) Relation of margin to body of letter.
- 8. Margins:
 - (a) General rules all margins.
 - (b) Side margins and top margins, special rules.
- 9. Paragraphs:
 - (a) General (purport, indentation, length, uniformity, etc.).
 - (b) Specific (depending on the firm's policy, etc.) Begin each line at 10. End as nearly as possible at 70. Begin paragraphs at 20.
- 10. Letters of more than one page—method of heading (top or bottom):
 - (a) Number.
 - (b) Customer's name.
 - (c) No mark at all.
- 11. Complimentary closing:
 - (a) Firm name.
 - (b) Some individual.
 - (c) Official position.
 - (d) Types of closings.
 - (e) Show standard signatures and how typed (capitals, etc.).
- 12. Identify dictator and transcriber:
 - (a) Dictator's initials first.
 - (b) Transcriber's initials second (ABC:X).
 - (c) Separation of initials.
 - (d) Number of initials used.
- 13. Departmental details—office work other than stenography, typing, etc.:
 - (a) Use of tickler file.
 - (b) Cross-references.
 - (c) Interdepartmental mail service.
 - (d) Making out reports:
 - (1) Work sheets.
 - (2) Time sheets.

III. SPECIAL INSTRUCTIONS—PHONOGRAPH OPERATION

- I. Use of phonograph:
 - (a) General points:
 - (1) Electric circuit to be closed.
 - (2) Cylinder to be placed on holder.
 - (3) Reproducer as far to left as possible.

- (b) Description of particular machine—only enough to get a working knowledge of the machine.
- 2. Driven by electricity.
- 3. How to complete circuit (use of switch "on" and "off").
- 4. Cylinder of wax, hollow, one end larger than other.
- 5. How to handle cylinder; for example:
 - (a) Insert fingers in smaller end.
 - (b) Never grasp surface with bare hand.
 - (c) Push firmly over the holder.
 - (d) Removal and use of "cylinder ejector."
 - (e) In case it sticks, etc.
- 6. Use of the "reproducer":
 - (a) Raising into place.
 - (b) Regulation of quantity listened to.
- 7. Starting and stopping.
- 8. Handling of finished cylinders:
 - (a) Length of time retained before shaving.
 - (b) When kept awaiting shaving.
 - (c) Method of collection, kinds of racks, and the schedules and clerks.
 - (d) Who shaves them.
- 9. Handling unfinished cylinders:
 - (a) Where kept.
 - (b) Methods of identifying them from finished cylinders.

IV. SPECIAL INSTRUCTIONS—FILL-IN TYPISTS

- 1. Use of form letters.
- 2. Kinds:
 - (a) Sample to be copied by typists.
 - (b) Multigraphed copies:
 - (1) Address to be filled in on typewriter.
 - (2) Color of ink (adjustments).
 - (3) Adjustment of typewriter.
 - (4) Addressing envelopes for circulars and form letters.

V. GENERAL RULES FOR CAPITALIZATION, SYLLABICATION, AND PUNCTUATION

In view of the complete discussion of the work of the stenographic department given in Part IV, any further comment on the above outline is unnecessary. In this connection,

however, it is worth noting that many concerns today have prepared manuals covering important rules of composition which bear directly upon the typist's work. Generally the transcribers are not required to pass regular tests upon these rules, but they are held responsible for mistakes which could have been avoided by reference to the manual. The rules are not expected to replace judgment and common sense, and the employee is urged to interpret them in accordance with the meaning to be expressed. Such manuals can be made up readily by following the method used by authors of text-books on business English.

Further Samples of Outlines of Courses

Every clerical department of a business, after analyzing its routine and the nature of the work carried on, can outline a course of study adapted to its peculiar needs as illustrated above. To show the possibilities in this direction two further courses covering the work of the complaint and filing departments are appended.

OUTLINE OF COURSE OF STUDY FOR COMPLAINT DEPARTMENT*

- I. GENERAL INSTRUCTIONS (to give adjuster an idea of work to be done)
1. Policy of the house.
2. Classification of complaints (basis of dividing work into special adjustment sections to be handled and specialized).
 - (a) Non-delivery or shortage in stock, delay, error.
 - (b) Unsatisfactory service:
 - (1) Errors due to inaccurate figuring, copying, filling, careless penmanship, or wrong interpretation of customer's orders, mistakes in transcription, etc.
 - (2) Delay in filling orders and getting out mail.
 - (3) Discourtesy and indifference to customer's requests.
 - (c) Unsatisfactory goods:
 - (1) Quality.

*See also Chapter XXII.

- (2) Style.
 - (3) Durability.
 - (4) Damaged goods, etc.
 - 3. Character of general information:
 - (a) Methods of receiving orders and contracts.
 - (b) Methods of filling orders.
 - (c) Methods of recording data:
 - (1) The order—stock, substitution, custom made, held orders (more information needed), back orders (goods temporarily out), cancellations (cannot be filled).
 - (2) The sales record.
 - (3) Accounting records.
 - (4) Handling special conditions—returned goods, alterations, balances, cartage charges (railway cartage, etc.), damaged and other claims, questionable and dead-beat claims.
 - (5) The files:
 - Sectional headings showing nature of records in any file section.
 - Kind (card, folder, etc.).
 - How filed (alphabetically, etc.).
 - Departmental locations of files.
 - Which files are best suited to certain kinds of complaints.
 - 4. Sources of general information:
 - (a) Departmental manuals.
 - (b) Departmental heads.
 - (c) Clerks and others.
 - (d) Records—showing conditions in the order:
 - (1) Price lists, catalogues (showing goods carried by the firm).
 - (2) Order itself, contract, correspondence (showing special items involved).
 - (3) Records of adjustments and others (see above).
- II. SPECIFIC INSTRUCTIONS (covering detail of adjusting—instructions must be accurate, complete, and definite)
- 1. Sources (same as above, the method of attack is different).
 - 2. Details regarding materials and supplies:
 - (a) Lists required.
 - (b) Symbols and use of requisitions.

- (c) Location, cabinets, etc.
- (d) Care and economy in use (redemption of mutilated stamps, etc.).
- (e) Use of various forms:
 - (1) Serial numbers, fill-ins, copying, etc.
 - (2) Fastenings or stitching.
 - (3) Carbons (number and filing instructions).
 - (4) Folding letters, circulars, etc. (use of window envelopes).
- 3. Details of operations:
 - (a) Receipt of complaints—letters, telephones, personal, telegrams.
 - (b) Mail classification.
 - (c) Routing of mail to departments and individuals—system explained.
 - (d) Method of handling papers before they come to adjuster—symbols, records, etc. (see above).
 - (e) Handling of adjustments after completion:
 - (1) Which are to be handled by other departments and why.
 - (2) Which are to be destroyed.

III. DUTIES—OTHER THAN ADJUSTING

- 1. Keep adjustment files (how and when done).
- 2. Arrangement of papers in finished adjustment.
- 3. Keep records:
 - (a) Permanent (use and form).
 - (b) Courses of adjustments (noting errors and assigning responsibility).
- 4. Daily reports, efficiency records, etc.

IV. INSTRUCTIONS AS TO DUTIES—ADJUSTING ROUTINE

- 1. Getting the facts:
 - (a) Letter or person complaining.
 - (b) Personal examination of company's records and the cost—what to look for; can record be borrowed or must information be copied; etc.
 - (c) Forms used to get information from department, files, etc. Time to be allowed for answer to adjuster's questions.
 - (d) Getting information over the telephone—code terms used by the house, etc.

2. Using the facts:

- (a) Adopting a course to pursue.
- (b) Relation of records to action taken.
- (c) Complaints due to errors (settled on discovery).
- (d) Recognizing the exceptional case.
- (e) Forms of adjustment:
 - (1) Verbal.
 - (2) Written:
 - Form letter.
 - Dictated letter.
 - Points to be covered in explanation:
 - Regret for the cause.
 - Statement of facts of the case and promise to prevent recurrence.
 - Appreciation of patronage, etc.
- (f) Records of adjustments should show how they were handled; for example, record of shipment (a form adjustment), delivery record compared with date of complaint shows:
 - (1) Complaint was written *before* delivery could be made—address S/M (shipment made) post-card, filling in date of shipment.
 - (2) Complaint written *after* delivery should have been made—address Tr. (tracer) post-card, filling in date of shipment.
- (g) Repairs or alterations adjustments:
 - (1) Description of forms used in getting work done.
 - Instructions to repair clerk.
 - Forms for getting goods, samples, etc., out of various departments, etc.
 - (2) Authorization for shipment—explaining difference in procedure from handling regular order.
 - (3) Routing instructions for finished adjustments.
 - (4) Nature of reply.
 - (5) Accounting and adjustment records.
- (h) Exchanges and duplicates (goods returned and new merchandise given in their place); the following points should be covered whether returns are made in person, a call of company's messenger, or by mail:
 - (1) Credit slip or voucher.
 - (2) Receiving the return.
 - (3) O K's demanded by adjuster.
 - (4) Account of transportation charges.
 - (5) Instructions for authorizing new shipment.

- (6) Specific routing instructions for finished adjustments.
- (7) Accounting and adjusting records.
- (8) Nature of reply, if any.
- (9) Recovering claims in case of duplicate shipments.
- (i) Credits (amounts allowed customers); method depends on company policy (1) charge accounts demand only book-keeping records, (2) cash transactions involve credit slip or voucher, (3) voucher or credit slips as "cash" in purchases but not for refund; the following points should be studied:
 - (1) Evidence of O K's on which allowance is based.
 - (2) Instructions for authorizing credit.
 - (3) Making the credit voucher for customer.
 - (4) Specific routing instructions for finished adjustments.
 - (5) Accounting and adjusting records.
 - (6) Nature of reply, if any.
- (j) Refunds (amounts returned to customers); policy: when money is refunded depends on circumstances—goods not delivered, money refunded at once; prevent refund by filling order if possible and dissatisfaction can be avoided: the following details should be taught:
 - (1) Form of refund—check, cash, money order.
 - (2) Evidence for O K on which refund is made.
 - (3) Instructions for authorizing fund.
 - (4) Making refund and receipt.
 - (5) Routing for finished adjustment.
 - (6) Accounting and adjusting records.
 - (7) Nature of reply, if any.
 - (8) Getting the refund back and still keep good-will.
- (k) "No record" adjustment (an essential record is missing). These and other "policy" adjustments are made after investigation, but rather than lose the good-will of a customer, too much time is not consumed in settling a claim based on an element of reasonableness.

OUTLINE FOR COURSE IN FILING DEPARTMENT*

I. ESSENTIALS FOR ACCURATE FILING

- I. Necessity for accuracy (a lost record may mean a lost friend—a customer).

*See also Chapters XIII and XIV.

2. Personal qualifications:
 - (a) Thorough knowledge of alphabetic sequence.
 - (b) An instinct for interpreting handwriting.
 - (c) Ability to digest quickly subject matter of a letter.
 - (d) Rapid judgment in execution of duties.
3. Necessary conditions:
 - (a) Papers of uniform size (clippings, memos, etc., mounted on uniform sheets).
 - (b) Uneven papers put in folders (horizontal and vertical filing), thereby obtaining a "filing unit" of uniform size and shape.

II. METHODS

1. Flat filing (records laid flat—large sheets, blue-prints, etc.).
2. Vertical filing (records on edge).

III. SYSTEMS

1. Alphabetic.
2. Alphabetic-numeric.
3. Decimal.
4. Geographic.
5. Numeric.
6. Subject:
 - (a) Direct.
 - (b) With index.

IV. ELEMENTARY POINTS FOR BEGINNERS

1. Equipment (cabinets, index cards, sorting trays).
2. Basis on which a system is selected:
 - (a) Cards—small drawers.
 - (b) Sheets—low, flat drawers.
 - (c) Correspondence—wide, deep drawers.
3. Instruction on filing *back of* or in *front of* index guide cards.
4. What papers are to be filed and when.
5. Essentials of leading systems:
 - (a) Geographic—papers assorted into headings for filing: state, town, name.
 - (b) Alphabetic:
 - (1) General correspondence file—correspondent's name is most important.

(2) Equipment—guides and folders described.

(3) Advantages:

Permits of direct reference to the file.

Saves time in filing and in selection.

(c) Numeric:

(1) Subject matter of most importance.

(2) Brings all related papers together.

(3) Equipment:

Card index (3 x 5, alphabetic).

Deep drawers for correspondence folders.

Guides of heavy press-board with celluloid or metal tips.

Folders of heavy manila stock.

Small drawers for cards.

(4) Advantages:

All papers are found by reference to the index number. The index furnishes a complete reference list of names, addresses, etc., of all people with whom the company has any business dealings.

Clerks work more rapidly when dealing with figures than with letter combinations.

(d) Alphabetic-numeric:

(1) Various systems.

(2) Chief characteristics of simple alphabetic system.

A direct alphabetic file with numbers assigned to each guide in consecutive order, beginning with No. 1; in this method the numbers represent only a general location and the individual paper would necessarily be filed back alphabetically.

(3) Advantages:

Reduction of errors so prevalent in alphabetic method.

Reduction of time spent in operating card index of numeric system.

6. Follow-up system:

(a) Permits correspondence, etc., to be taken to files instead of being held on correspondent's desk when not needed immediately.

(b) Description of tickler system:

(1) Mark date wanted in lower left-hand corner when sending papers to filing department.

- (2) Clerk makes out following card:
Date wanted.
Return papers to.
File No. or folder name.
Subject.
Remarks.
- (3) Paper is put in proper file.
- (4) Card is filed in tickler tray under the date specified.
- (5) Clerk examines tickler file first thing each day.
7. Charge systems (when papers are drawn from files a record is needed to keep track of them):
 - (a) List method—shows papers drawn, date, and by whom; entry crossed off when returned.
 - (b) Charge sheet—same as list, but is filed in place made vacant by withdrawn papers; destroyed when papers come back.
8. Cross-references:
 - (a) Card index in conjunction with file.
 - (b) Papers located quickly since they are classified in many ways.
 - (c) Data needing more than one classification subject index are indexed and filed under most important only. But other names, synonyms, etc., are indexed—each card bearing the number under which the paper is filed.
9. Lost papers:
 - (a) Never reached the files:
 - (1) Locating fault outside the filing department.
 - (2) How follow-up system helps.
 - (3) The "pending tray" for all unfinished records, etc.
 - (b) No record of removed papers:
 - (1) Time lost by hunting for papers; two executives may want data at same time.
 - (2) See charge systems for cure.
 - (c) Misfiled papers:
 - (1) Carelessness, incorrect guiding.
 - (2) Overcrowding folders.
 - (d) Omission of index card for some necessary subject or title.
10. Guiding:
 - (a) Description of methods for various systems—alphabetic, geographic, etc.

- (b) Good guiding depends upon the depth (back to front) of the file drawer, the class of material and thickness of guides:

- (1) Card index—guide to every 20-40 cards.
- (2) Alphabetic—guide about every inch.
- (3) Numeric—guide every 10 or 20 numbers.

V. DUTIES OF FILING CLERKS

1. Responsibilities assigned on basis of:
 - (a) Experience.
 - (b) Ability.
 - (c) Amount of filing and looking up work.
2. List of activities:
 - (a) Assort papers for file (use of assorting books).
 - (b) File papers.
 - (c) Verification of files (testing the sequence).
 - (d) Verification of addresses with no index card.
 - (e) Prepare index cards or make corrections called for in (d).
 - (f) Look up papers on requests.
 - (g) Handling of special requests (reference to charge sheet necessary, etc.).
3. The percentage of efficiency based on *not* found papers.

VI. AIDS TO EFFICIENCY

1. Quietness (necessity of filing cabinet being segregated from general office).
2. Freedom from interruption:
 - (a) Work divided equally into sections among clerks.
 - (b) All work of a section assigned to one clerk (not work covering all the files, which necessitates running about).
3. Placing of responsibility for up-keep of a special portion of the files.
4. File drawers marked with contents (proper cabinet quickly found).
5. Guide cards already placed in file (proper space easily found).
6. Assorting books* (rehandling eliminated).
7. Efficiency records.

*"An assorting book is a book with heavy cardboard leaves, each marked according to the system of filing. In geographical filing, there will be one assorting book arranged by State, Alabama, Arkansas, Connecticut, etc. Another book indexed with the letters of the alphabet for assorting each State by town. Then by clearing the book the same indexes may be used for assorting by name."—Report of Committee on Office Work School, National Association of Corporation Schools, 1916.

Arranging the Outline into Lessons

After teachers have been selected it is necessary for them to group the material in the outline into suitable units, or lessons, for teaching purposes. Printed lesson sheets are a great aid in giving the pupils a clear explanation of the routine. For example, in teaching the function and use of the index card in a numeric filing system, the lesson may be arranged as follows:

1. Explanation of use and importance of index card file.
2. Kinds of cards and use of each.
3. How to inspect the cards before they are filed.
4. How to file the index cards.
5. How to revise index cards.

Each file may be taken in this manner, and topics so arranged that the subject will be mastered in the order in which the work is done.

A class being formed, the time may be divided into three periods:

1. A period for study.
2. A period for class instruction.
3. A period for practical work.

CHAPTER XXXIV

THE LANGUAGE OF BUSINESS—WRITING

A General Service Activity

The use of language, written and spoken, on the part of all members of the organization, constitutes a general service activity whose importance is only beginning to be recognized. No trading organization could be operated without the skilful command of language; in every transaction with the public, intelligent exchange of information is an essential element. The same may be said of almost every step of operating procedure within the organization, in either factory or office. There are always orders coming down from superiors, reports going back, and conferences regarding the interpretation of the two series. Inquiries and investigations must be carried on. Answers to inquiries from outside, and adjustments of complaints must be made. Besides all this there is the mass of apparently casual communication incidental to the task of inducing a large and varied force of employees to work together harmoniously and vigorously. Officials and workers of all sorts must have a ready and sufficiently accurate command of the intellectual medium of exchange.

Poor Command of Language a Handicap

These statements would be admitted by any business man, although their implications are only beginning to be recognized. Once we conceive of language as the medium of exchange it becomes evident that having that medium in the best possible condition is an important part of business management. Language is so intimate an activity, however, that few of us have a clear notion of its characteristics, or the prin-

ciples and requirements of its effective use. Everyone knows that no business could be operated effectively by deaf-mutes, or by persons unable to read or write, but most business men fail to realize that partial deficiency in the command of the instrument of communication is as real a handicap to everyday working power as total deficiency, though in a less degree. The clerk or supervisor whose handwriting is hard to read, whose spelling is unreliable, whose speech is indistinct, uncertain, or untactful, slows up the office machinery; language deficiency handicaps him as truly as it does the salesman who must deal with customers.

Deficiency Very General

Many persons, if not the majority, are actually deficient in ready command of language to the extent of impairment of their working effectiveness. This is due partly to defects of early education, partly to the general carelessness of society at large. Nearly all of us maintain a double standard in the matter of language. We assume that everyone can and does express himself adequately in writing and speech—that is, with reliable correctness and effectiveness—yet as a matter of fact we rarely expect anyone to meet this standard. We take for granted that the ordinary office worker knows the multiplication table automatically, but we do not expect him to be able to say what he means in common talk and writing. We do not at all expect distinctness and correct pronunciation in speech, legible handwriting and correct spelling in writing, and clear and orderly expression of thought in both writing and speech. Yet all this is entirely within the capacity of any person who can handle elementary work with figures.

The low standard in this matter may be evidenced by two facts: first, the large percentage of girls rejected by the telephone companies as not able to attain even the moderate level of efficiency required of applicants for positions as

operators; second, the small number of employees, in any department of a business, who can be trusted to write even a simple letter without supervision.

Deficiencies Removable

These deficiencies in command of language, though serious, are readily removable even in adults. Nelson Durand, of the Edison Company, said recently with special regard to correspondence, that a campaign for better business language, if undertaken on a sufficiently broad scale, would probably bring as swift results as did the Safety First movement. The analogy is suggestive. The ordinary defects in the use of language are largely owing to negligence. They may be remedied by paying attention. A moderate amount of instruction, if systematic, and if supported by consistent supervision, will raise the standard of language throughout the establishment. This in turn will increase the speed and efficiency of many of the office activities.

Very few business houses have taken up the matter of language effectiveness in a systematic way. Some firms which employ many foreigners as unskilled laborers, try to teach them the rudiments of English, written and oral. Some firms require a moderate standard of skill from the persons who write their letters. A few give a little attention to speech on the part of representatives who meet the public; as a phase of good manners, employees are cautioned to avoid slang and bad grammar; and certain words are blacklisted—for example, "madam" is required instead of "lady." This is not an adequate handling of the matter. Careful analysis and systematic treatment are necessary to obtain profitable results.

Need of Centralized Control

The use of language enters into the business of the office in many different ways. Some of it—the preparation of

advertising copy and of sales letters and talk—is highly technical work, with which only a few specially trained persons, in a few departments, are concerned. Some other phases of it—correspondence and the handling of investigations and reports—while less technical in character, concern only the executives and higher employees. On the other hand, the mass of incidental talk and the intelligent use of memos and written forms, concern all members of the organization.

Much more attention has been given to formulating directions for the special and technical work, although it affects only a minority of the members of the organization, than for the activities with which the less skilled employees are concerned. Yet it is in connection with the simple writing and speech of the mass of employees, hitherto most neglected, that the chief gain may be made, through standardizing and through centralized control.

Centralization cannot, of course, take the form of creating a distinct department. The language activities of the organization are incidental to other work. But uniform standards, and so far as possible a uniform procedure, should be worked out and observed throughout the organization. Supervisors serving the whole organization might be useful. Such a plan has been adopted by some business houses with regard to correspondence. It might be adopted with equal advantage in the case of speech.

Language in the Office—Principal Phases

The phases of the use of language calling for chief consideration here are, with regard to writing: correspondence, memos and forms, reports. With regard to speech, aside from certain matters such as telephone talk, and the special talk required of executives and supervisors, the principal matter is the miscellaneous incidental conversation connected with the ordinary working routine throughout the organization.

Correspondence

Correspondence constitutes one of the most important parts of the work of the modern business house. Without it the operation of the business would cease. Without at least a minimum of efficiency, the affairs of the house would be in serious confusion. With a large concern the number of letters coming and going daily runs into the thousands. They are sent out from practically all departments. While some departments issue only a few, written chiefly by department heads and dealing with matters of administration and so on, other departments such as the advertising, sales, and collection, issue a large number daily and many persons have a hand in their preparation. In addition to the outside correspondence there is always a large volume of interoffice correspondence. The total number of persons concerned in one way or another is strikingly shown by the fact that the stenographic department, in which many business houses have assembled all the mechanical work connected with correspondence, is always one of the largest in the organization.

There is wide variety in the nature of the letters of a business house, but the classes most usual are: inquiries, answers to inquiries, orders, acknowledgments of orders, notices of shipment, letters dealing with adjustments, credits, collections, and sales.

Functions of Letters

H. N. Raseley of the Norton Company, Worcester, Mass., remarks: "Some of the things which letters are called upon to do are to collect accounts, to quote prices, to make adjustments, to sell goods direct, to give information regarding shipments, and many other subjects. The written representative has certain disadvantages in that the man behind the letter does not know personally the one to whom he is writing. He cannot judge of the immediate effect of his words upon

the reader, which, were he in personal contact with his party, he could detect by noticing his facial expression. In addition many things can be said in conversation which would be regarded as aside from the question at hand, were the same thoughts expressed in writing. The letter must produce the effect of a conversation without actually being a reproduction of the conversation.

"It is necessary that business letters be interesting, that they have a friendly touch, and what is of greater importance they must make an endeavor to impress their message upon the reader. It is the purpose of the letter to drive home the fact or facts contained in it or else the letter has very little excuse for its existence."

While some kinds of letters seem to require more care than others, any letter may cause serious trouble if careless or incorrect. Every letter represents the organization and is, in a certain sense, a salesman. With the great expansion of business in recent years came an enormous increase in the volume of correspondence. Provision for handling it was inadequate, and the result was a serious lowering of standards of accuracy and effectiveness. Some of the largest business houses in the country discovered to their chagrin that their business was receiving grave injury from tactless and ill-constructed letters sent out by their representatives.

The purely mechanical difficulties connected with the correspondence of a large organization are very great. Many stenographers and typists are needed. It is difficult to secure a high and even standard of accuracy and speed. The larger the organization the greater the overhead, the greater the pressure for speed, and the greater the chance of errors.

Difficulties of Composing the Letters

The difficulties connected with the composition of the letters are even greater. In the first place they are written

by many different persons. The expression of ideas in letter form is to a considerable degree a special art, but few of the persons who have to do it have received any special training, or have thought of it as a matter requiring training. As a rule a man grows into the duty of letter-writing in the course of promotion from other work, and has no notion of method further than that of imitating the practice of his former chief. In this way conventional mannerisms, ineffective and even harmful, are passed on from one person to another.

The dictators differ widely, moreover, in their personality and in their education. Some have the gift of language and others have not. They differ also in their views as to the quality and function of letters. A prominent official of one of the largest distributing organizations in the country insists that he finds it quite unnecessary to read the letters which he answers. His secretary reads them, and marks in each letter the point requiring attention. The opening sentence of every letter consists merely of a conventional acknowledgment of the receipt of the correspondent's letter; the concluding sentence is merely a conventional expression of good-will. All this executive needs to think of—he maintains—is the two or three sentences in which he discusses the point which his secretary has noted! This gentleman is one of the leading persons in his concern, and yet he seems perfectly serious in his notion of the way to handle correspondence.

Lack of Standards in the Past

In view of the wide variety in the attitude of mind and the competence of the persons composing the organization's letters, it is manifestly difficult to maintain any satisfactory standard or any consistent policy in regard to its correspondence.

The difficulty has been increased by the absence, until recently, of any careful standard as to the letter itself. The

old-time business letter was a lengthy affair, written with careful deliberation in longhand. As the mail service was slow and expensive, one letter often treated a number of topics. It was built on the same lines of formal courtesy that marked the old-time personal letter.

These characteristics are out of place in the quicker life of modern business. The typical letter developed by the conditions of business today bears more resemblance to a telegram than to the letter of earlier times. It is a brief, concise treatment of a single point, from which everything not essential is eliminated. If a second or third topic needs to be presented to the same correspondent, additional letters are written. The letter of today, moreover, is composed in hurried dictation by one person, and written out by another, on a machine. Such balance and harmony of structure, such grace of style as it may attain must, of course, be different from the manifestation of these qualities in earlier times.

But as the old-fashioned longhand letter was the only model in existence, dictators of all sorts have made the effort to combine the brevity, directness, and fragmentary character of the modern business message with the external rules of politeness of the older time, often with unsatisfactory results. Some houses have attempted to discard entirely the old-fashioned, conventional introductions and conclusions, or to save time and effort in addressing the envelope by using "window envelopes," but these methods have not met with much favor.

From the causes mentioned, a large proportion of the letters on which the profit or loss of the business depended have been extremely inadequate. Layout and typing, spelling and punctuation, were often careless and incorrect. The letters were frequently obscure in expression; they were too long or too short. They read as if the dictator did not understand his case. They were awkward, and often unpleasant or

uncivil in tone and spirit. As Mr. Tinsley of the Crompton and Knowles Loom Works, remarks: "The matter of lost and wasted energy in our shop operations has received much consideration by up-to-date business management. Yet few of us stop to think of the energy lost incident to the waste of time and material that can be properly charged to inefficiency in correspondence."

Efforts for Improvement

The situation began to improve when managers realized that correspondence is an organization matter and cannot be left to the individual typist, or to the dictator, no matter what his position; that the use of the house letter-head carries with it responsibility for maintaining house standards. Obviously, standardization and centralized control were desirable, so far as they could be secured.

One of the first steps was the development of a centralized department to deal with the mechanics of the letter. This made possible the standardization of layout and general style.

Next came the differentiation between the outside correspondence and that within the organization. Inside correspondence is today handled by means of various memos and printed forms. Conventional terms of introduction and conclusion are omitted. The needless typing of names and addresses is eliminated, and inter-office letters consist merely of the subject matter under discussion.

Control of Dictators

Finally came the effort for systematic control of the persons having the responsibility of dictating the letters. Direct centralization was, of course, impossible. The origination of the letters of an organization is a matter of departmental, even individual, activity; it cannot be turned over to a central group of letter-writers—although this has been done to a limited

degree in some large organizations, with certain classes of letters. The problem is to work out uniform standards and methods, and have them observed by all the letter-writers of the organization. Centralization of the stenographic work, it should be said, aided greatly in arranging a satisfactory control of the letter-writers. The adoption of dictating machines throughout the organization aided also. Many of the organizations interested in the promising better-letters movement use dictating machines almost exclusively.

Form Letters and Paragraphs

One device which has contributed to the improvement of the work of the dictators, although it was adopted in the first place merely to save time and expense, is the development of form letters, form paragraphs, and outlines, largely used today in all business houses. Professor Gardner remarks in "Effective Business Letters":

"The familiar example of the complete process form is the sales letter prepared in quantities in imitation of type-writing, with its address and possibly other material filled in by the typewriter before it is sent out. But in a large business with correspondence on fixed subjects, a great many kinds of letters can be handled by 'process' forms.

"The paragraph form is a letter composed of paragraphs which have been prepared in advance but which can be selected and combined to meet specific situations. It is more flexible than the complete form; indeed, the paragraphs selected can in most cases sound as personal and fit the reader's needs at least as well as does the usual dictated business letter. Since such letters must be individually typewritten they have not the appearance of a form. In answering inquiries or in handling collections the paragraph form is of great service. It can be put to many other uses.

"The paragraphs can be prepared partly in advance on the

basis of study and experience, like any series of form letters. Then after correspondence on the subject which they cover has been carried on for a short time by dictated letters and by forms, the forms can be revised and added to by paragraphs taken from the dictated letters.

“The guide form is a letter prepared like the complete form to meet a typical situation. But the correspondent uses it only to guide his dictation, and changes its wording to fit the case he is handling. In cases subject to so much variation that even the paragraph form will not apply, and in small businesses where a thorough system of forms is not worth while, the guide form can be employed to improve the style of correspondence. Guide forms should be changed frequently, lest they lead to a stereotyped style. . . .

“The first purpose of forms is to save expense. The second purpose is to provide a better letter. Forms can always be well written, carefully revised, and adapted precisely to subject. On the score of adequate language alone, the dictated letter, unless written by an expert, is often inferior to the form.”

Training the Dictator

Yet forms alone, without skilful dictators, will not insure satisfactory letters. In mixing form material with dictated material, it is extremely difficult not to show the patching. The most serious objections to the use of forms is not that they are not well written, but that they are all written, in a sense, too well; they do not fit with the natural style of the ordinary dictated letter.

The only thoroughly satisfactory way to get good letters is to train the dictators—that is, to see that all persons who have the right to use the firm's letter-head are competent to send out letters which will be creditable to the firm. Competence means, in this connection, the ability to turn out good

letters day after day under business conditions which allow little time for preparation or revision. Efforts at such training have begun only within the last four or five years. At first they were made rather timidly. The conception of correspondence as an organization matter was new and the first efforts for improvement had to be made with caution and tact.

The first step usually was the preparation of a correspondence manual covering the letter-writing of the organization. These manuals, whose use has become very general, differ widely in range and character.

A Correspondence Supervisor

It was found, however, that the mere preparation of a manual did not suffice and the next step was the appointment of a correspondent critic or supervisor to see that the suggestions given in the manual were lived up to. The chief progress of the last few years has been in this direction. These supervisors in some cases have the power merely to criticize, but in other cases they have the power: (1) to censor and hold up all letters which go out from the organization, even those written by the officers; (2) to give instructions to the persons whose duty it is to write letters.

The rapid advance made was shown in the "Better Business Letters Conference" held with the Norton Company, at Worcester, Mass., in October, 1917. At this gathering 150 firms were represented and attention was given predominantly to the matter of supervising and training dictators.

The method of training developed in the Norton Company, which has given special attention to this matter for several years, is described thus by Mr. Raseley:

An Effective System of Training

"The person selected for dictation work is first interviewed by the correspondence supervisor. He is then taught to use

the phonograph which is the dictation medium and is kept at it until he thoroughly understands how to use it. Clear dictation is very essential in order that what is said may be transcribed in a minimum amount of time, thus keeping the operating cost as low as possible.

"The next step is to give the new dictator a very complete idea of the requirements and just what will be expected of him. It is then necessary for him to study a 70-page manual which contains instructions bearing directly on his work. This manual fills a very important place in the daily life of those who write our letters. Each one has a copy of it in his desk for ready reference.

"When this ground has been covered the new dictator is given a number of letters to which he is required to dictate answers. The dictation is transcribed and is later criticized in company with the new dictator so that he will know just what to expect in the way of supervision of his work.

Careful Supervision

"Should his work up to this stage demonstrate that he is not fitted for letter-writing, he can be dropped from the list of eligibles with recommendations as to what he had better do in the way of further training for himself if he wishes to be considered again at some future time.

"Should he show a certain amount of aptitude, he is added to the dictating force but his name is kept on what is called our active list and nothing that he writes is allowed to leave the organization until it has passed the department of supervision. His work is followed in this way until we are satisfied that he can dictate letters that will be truly representative of the organization. If he does not develop satisfactorily during this additional trial period, he can then be dropped from the regular force with suggestions as to how he can better fit himself for the work. For people who have reached this

stage there is almost always a certain amount of minor dictation work which they can take care of satisfactorily in which case they are retained on the force.

"When the new dictator reaches proficiency, his work comes up for criticism only periodically.

"The procedure outlined is the same whether the new dictator has had experience elsewhere or not. It has been the writer's experience that the raw recruit reacts more quickly to the treatment than the person who has had correspondence experience, as we know correspondence experience today. The green man is not handicapped by habits wrongly formed.

Careful Records

"A record is kept of each man's work so that it is possible to keep in touch with his progress at all times. The following figures will show just how closely this can be done.

Date	Letters Read	Criticisms	Per Cent	Rewritten	Per Cent
January	217	106	48.8	29	13.4
February	149	89	59.7	23	15.4
March	310	62	20.0	11	3.5
April	252	43	17.1	7	2.8

"Pressure on the points wherein this dictator was weak enabled him to make the improvement noted for the months of March and April.

Impersonal Criticism

"The work of criticism of the dictators is carried on by means of slips on which are given the points wherein it was found that our letters were faulty. The following is a list of these:

1. Clearness, incomplete information, involved.
2. Conciseness, needless words, unnecessary information, repetition.

3. Correct words, choice of words, sentence length.
4. Arrangement, emphasis, construction, correctness.
5. Awkward, courtesy, tone.
6. Policy, subject, delayed answer.

“This list could be made much longer but the things which we have to contend with group themselves very nicely under these headings. Criticism is never made unless the one making it can help the dictator improve the passage or passages under consideration.

“It would be possible to make criticisms in pencil on the letters themselves. This is expressly avoided as every one has a certain pride in his work and to see it marked up is discouraging. There would undoubtedly be natural resentment to the work of criticism if this scheme was followed.

“Needless words, stereotyped phrases, trite expressions, many times spoil what otherwise might have been a good letter. It can safely be said that the character of a letter is often simply smothered because the writer has followed the same old humdrum, beaten track by employing forms of expression which have been used by thousands of so-called business letter-writers for many years past.”

Beneficial Results of Supervision

The plan of training and supervising the dictator has generally justified itself when adopted. It strains out the unwise letters which might do harm by misrepresenting the policy of the firm. It discovers which persons, among the department officials, should not write letters at all, and which ones require careful training before they can be safely trusted. It helps to explode the old notion that anyone can write letters. There is an aptitude for letter-writing as for any other technical work. But such training and supervision encourage those possessing the aptitude to use their powers freely. As

a result they produce letters which are essentially like direct and flowing talk. The importance of directness, simplicity, and vivacity in business letters is overlooked by many persons. It is to these qualities that good business letters owe their success. Few sales talks or circulars can be as convincing or winning as a well-written letter, a comprehensive, sincere statement in simple and yet dignified form, by one who thoroughly understands his subject.

A further result of the system of training and supervising dictators which is of the utmost importance, is that it diffuses a general standard of form and quality, and leads to the development of an individual character for the correspondence of the organization.

The points to be noted regarding the development of control of correspondence are these:

1. The high degree of success often obtained in the correspondence of progressive houses today.
2. The difficulties with regard to correspondence are a result of leaving the problem to be handled by each person individually; when treated systematically, as an organization affair, the difficulties disappear.

Business Reports

Another form of writing which fills an important place in the work of any large organization is the preparation of reports giving the result of an investigation or summarizing the history of a transaction. Reports are prepared by all persons in executive positions, higher and subordinate. They involve the statement of facts and usually the recommendation of action.

At first thought the two general types, the routine report from subordinate to superior and the report of a special investigation—whether by a member of an organization or by

an outsider—may seem dissimilar. Their essential characteristic, however, is ultimately the same.

A report is a statement by a "specialist" in a certain matter, to one who usually has no special knowledge but who has the responsibility of action. The writer of the report may know his subject matter from long experience, or he may merely have crammed it up for the purpose, but in any case he has made a detailed examination. The recipient of the report must make a swift decision as to a course of action to be followed, relying on the information given him in the report.

Requirements of Reports

The qualities of a good report, as ordinarily emphasized, are:

1. Accuracy
2. Freedom from bias
3. Clearness of statement
4. Brevity

This analysis is not very adequate. The qualities mentioned are negative. A report might possess them all and yet be a poor report because lacking in insight. A better analysis would be:

1. A report should stress the right point.
2. It should be not only clear but illuminating.
3. It should be easy to read.

The difficulties connected with making a report grow out of the fact that it is written by one who possesses special knowledge for one who has not such knowledge. To the writer proportion, shading, emphasis, etc., are of minor concern: he possesses a complete and adequate background of general knowledge. To the reader, who knows only so much as the writer's words tell him, the matter of proportion and emphasis is vital.

Care for Structure

The first essential, therefore, is care for structure. The writer must maintain a right perspective; he must apportion space according to the significance of the matters treated; he must find the best possible order of arrangement; and he must omit all non-essentials, no matter how interesting. All this is difficult for anyone to do in the case of his specialty. It used to be thought that school-teachers and the clergy had a monopoly of what is known as pedantry—the fault of pouring out information ill-arranged and at too great length. The fact is that any man when he discusses his hobby or his special work is in danger of becoming pedantic—the shipping clerk, or the street-car conductor—as truly as the college professor. The writer of a report is under constant temptation to waste time and complicate his story by inserting matter which is interesting but not strictly essential. “All things are lawful,” the Apostle Paul remarks, “but all do not edify.”

Language and Style of Reports

The second essential concerns the language and the details of style. A report should be easy reading. Many men write in stilted, pompous language which might be called the “dictation style.” The simpler the language of a report, the better. Technical matters should be expressed in non-technical language. This is another difficulty for most persons. Every specialist comes to think in a kind of “trade algebra.” When he talks or writes he uses this technical dialect. We notice it in doctors and lawyers, but it is just as common among business men. When writing a report it is necessary to give the meaning in simple, literal words that require but little effort to comprehend. A good report should be easy reading, and not dull. The spirit of a good report is, of course, judicial and impersonal. There is no room for affec-

tation or show of any kind. At the same time it ought to be direct and human.

Suggestions as to Arrangement of Reports

The matter of standardization of form is not as serious in connection with report-making as with some other language activities, inasmuch as a smaller percentage of persons are concerned. Observation of the following points will save time and effort for both writer and readers.

1. The best order of material is that of the newspaper story with the point at the beginning. Do not as a rule use the inductive order of facts first and then generalization. The inductive order is the order in which we learn, of course, but it is not the order in which we teach.

A report should begin with a single brief summary of the results and recommendation, occupying perhaps a single page. Then should follow in the body of the report a clear, orderly statement of the case without going into much detail. Finally should follow an appendix giving detailed evidence to cover each point presented. If this order is followed, the reader catches at once, from the opening summary, the point which the writer wishes to make. He gets a connected story from the body of the report. If he is especially interested in verifying the statements and inferences, he can find the evidence in the appendix.

2. The material in the body of a report should be arranged in a definite pattern. The arrangement of the various points and the space to be allowed each of them should be planned much as an architect plans the layout of a building. For example, if there are three points to make in a certain case, it may be decided that No. 3 should fill three-fifths of the space, and No. 1 and No. 2, each one-fifth. That plan should then be adhered to.

3. Certain kinds of material require special care in handling. Statistics and masses of figures, generally, should be presented with suitable explanatory and "framing" matter. The same is to be said of verbatim testimony, and of lengthy citations from authorities. All such matter is much more illuminating and convincing for the non-specialist reader, if given in extract form, only the significant passages selected, and then properly introduced and explained, and the rest given in the appendix.

4. In the same way, a skilful report-writer makes large use of summaries and outlines, to render his work as intelligible as may be to the reader who must go fast. He is careful about the table of contents, and the index. Very often lengthy reports, dealing with important matters which must be often consulted, are presented with no index or table of contents whatever. Finally, considerations of paging, use of captions and sideheads, and—in case the report is in printed form—of typography, have much to do with its utility.

CHAPTER XXXV

THE LANGUAGE OF BUSINESS—SPEECH

Function of Speech in Business

Speech is used constantly by the members of any business organization in connection with their duties, chiefly in the form of brief and fragmentary conversation, and less often in the form of connected talk to individuals or small groups. Yet but few people realize how much their success depends upon its proper use. Its functions are: (1) to transmit information; (2) to assist in making the organization run more smoothly and effectively. It is a means of eliminating friction, of affecting and stimulating the personality of the workers.

Principal Occasions

The occasions for the use of speech are almost too numerous for classification. Some of them are:

1. Transmission of orders. This includes: (a) brief general statements of the gist of a matter to higher officials; (b) fuller explanations by these persons and others to employees lower down; (c) instructions to the workmen at the bottom. All these explanations will vary according to the situation and the individual addressed, but all must be skillfully managed.

2. Reports to superiors. These form an ascending series, as numerous and varied as the descending series of orders. Unless they are intelligently made the work of the organization is impeded.

3. Adjustments and answers to inquiries. There is a wide variety here also. The inquiries and complaints may

come from within the organization or from outsiders. They must be dealt with quickly and tactfully. Adjustments made over the telephone form an important division of this group, and a special technique for telephone conversation has been developed.

4. Conferences. The possibilities of delays in connection with conferences are extremely great. Skilful management and talk has much to do with expediting business.

5. Correction and stimulation of subordinates by superiors. Such work as this in any large organization is virtually endless in amount and variety. No problem is more serious for successful management than that of reaching and stimulating the personality of employees. The tactful and effective use of speech in the form of apparently casual conversation and suggestion is the greatest single agency for success.

Need of Effective Every-day Speech

It is essential that the incidental speech of all members of the organization be clear, direct, and accurate. The importance of a reliable telephone service is today taken for granted by every business house. Expertness in the incidental speech by which the activities of the business are carried on is equally important.

Speech that is clear, correct, concise, and emphatic saves time and effort for speaker and listener. An office manager lately remarked, with reference to the statements of subordinates: "One man makes a statement of complaint or injury in brief, clear, pointed form. I recognize that he has thought the matter out. I get his point at once. I have confidence in his insight and judgment, and I answer and settle the matter then and there. Another man, a "windjammer," takes five times as long to make a similar statement. His thought is evidently not clear or adequate. I must discount what he says

50 per cent, and I cannot settle the matter till I have checked him with other persons."

The volume of these fragmentary conversations, incidental to the work of the office, makes their conciseness and definiteness, their clearness and smoothness, very important. Individually they may be less important than individual letters or telephone messages, but cumulatively their importance to the work is much greater.

Should Be Pleasing as Well as Clear

It is important also that the incidental talk of members of an organization shall be agreeable, at least to the extent of being not unpleasant. The conveyance of ideas by means of an arbitrary set of sound symbols affects constantly the aesthetic sense of the listener. The sound affects the nerves of the ear: the formulation of the thought affects the sense of orderliness, neatness, etc. Speech which is harsh, uncouth, or careless in utterance, which is wordy and ponderous or incoherent and fragmentary in phrasing, which is flippant, rough, cold, or dull in a manner, produces automatically a distaste on the part of the listener. But if it is suitable in formulation, and clear and easy in utterance, it produces immediate pleasure. To have the incidental speech of the organization smooth and accurate is at least as important as to have the office equipment in good order.

Actual Deficiencies Today

The actual conditions in business houses today fall far short of the requirements just suggested. The present standard of speech efficiency is low. The deficiencies are as follows:

1. Indistinct utterance causes much delay and confusion; a great deal of time is wasted in merely asking over what someone has said.
2. Incorrect pronunciation, also common, adds to the

confusion. It is aggravated by the prevalence of various foreign accents.

3. Harsh or muffled tone is almost the rule. Voices which are at once audible, pleasant, and expressive are so rare as to be noticeable.

4. A limited vocabulary handicaps the work of many persons; for instance, that of stenographers who make errors because unfamiliar with the words which are dictated to them.

5. The most serious fault, however, is that of clumsy and incorrect formulation of the thought. It is the rare experience for persons to express themselves, in ordinary talk, in clear, simple, direct language. Much of the attention of the listener must be directed to determining the meaning of confused and fragmentary remarks.

Benefits of Systematic Control

Heretofore executives have ignored the low state of speech efficiency on the part of their employees, but the tendency to eliminate waste and confusion in all business operations calls for improvement here also. Great as is the waste resulting from ineffective correspondence, it has been much less than the waste resulting from inefficient talk. Improvement and standardization of the speech of the organization will make for increased production, as truly as does adjustment of the procedure in a factory. The result is less immediate. The improvement comes more gradually; but the result is no less certain.

Essentially the situation parallels that of the matter of correspondence. What is actually a general service activity, affecting the entire organization, has been left to individual taste and whim. Confusion and useless labor have resulted. The remedy is to treat oral communication, like written communication, as an organization affair. After the matter is

taken up systematically in this way, general improvement is entirely practicable.

Objections Sometimes Raised

At first thought it may seem that the difficulties in the way of general improvement are too great. The range of activities involved in speech may seem too great for standardization. Again, the matter of speech may seem too intimately personal to make the effort for standardization wise; or the objections may be expressed in other terms as follows:

1. The large number of persons involved.
2. The fact that nearly all of them are adults who have never given conscious attention to the way they talk.
3. The small amount of time or attention which can be allowed for definite instruction, and the belief that when the employee's attention is properly concentrated on the subject matter of his talk, improvement in speech is out of the question.

Objections Not Serious

These difficulties are less serious than at first appears. A systematic policy consistently applied will bring results. As to the first objection, a matter which affects virtually the entire organization, even a slight individual gain means a large gain in the aggregate and is worth working for. As to the second objection, speech is peculiarly a matter of habit. While improvement cannot be made suddenly, correct habits can certainly be formed, through steady pressure. Once formed, moreover, they remain; for they involve a gain in conscious control over the machinery of speech production, which eventually becomes automatic—like the military carriage of a properly trained soldier.

There is a wide-spread notion that the speech habits of adults cannot be changed. This notion is incorrect. The speech apparatus is highly sensitive; it retains its adjustability even in mature persons. Almost every person, as a matter of fact, uses various ways of speaking—different manner of utterance, tones, formulation of thought, etc.—for different portions of his daily existence. He talks in one way at home, in another way at the office, in another way with casual acquaintances, talking over the telephone, etc. If he moves to a distant section of the country where people talk differently, before long his own accent and manner of speaking are modified, without his knowing it, in conformity with the new environment.

The Essential—Intelligent Tactful Supervision

The matter of altering habits of speech is one chiefly of method. What is needed is careful, patient attention to certain points of muscle action with regard to utterance, and to certain points of arrangements of words in the sentence, which are apt to be neglected by the individual under the impression that they do not matter. In this the support of a definite requirement by the organization aids very largely. A systematic campaign should be followed, and the methods of instruction, rules, exercises, etc., should fit in closely and naturally with the necessary routine of the business. Any other method of procedure will only do harm by developing artificiality and mannerism. The aim with speech, as with writing, must be entire directness and simplicity.

Methods to Follow

It is necessary, first of all, to present the importance of the matter of speech to the attention of the employees in some adequate way. The first difficulty in improving speech lies in persuading persons of only average ability and training

to be consistently careful about seemingly trifling points of personal conduct. The difficulty is increased by the fact that few of the persons around them are thus careful.

Current Errors

For example, many people carelessly neglect to sound "t" in words like "certainly," or "mountain"; ninety-nine out of a hundred say "moun'n" and "cer'nly." But a very little attention to the way in which the muscles of the tongue move—merely remembering to use the tip of the tongue for such sounds—will enable anyone to produce the sound of "t" with absolute directness.

Take another case, Americans generally blur their vowels: they confuse short "i" with short "e": they say "sing" as if it were "seng." In the same way New Yorkers confuse long "e" and short "e"; they say "over here," sounding the "e" as in the word "there"—"over heh." There is a similar indistinctness in the other vowels. But vowels can be discriminated very easily by noting the height of the tongue in the mouth. On the sound of long "e" the tongue is as near the top of the mouth as it can get; for the short "i" of "bit," the tongue is a trifle lower; for the short "e" of "bet," a little lower yet; for the short "u" of "but," practically level; for the "a" of "bark" a little below level; for the "aw" sound of "saw" a little lower; for the long "o" sound of "boat," lower; for the short "u" sound of "cook," a little lower; and the long double "o" sound of "pool," at the very bottom of the mouth. Anyone with the aid of a mirror can work out the positions of the tongue, as definitely as a violinist learns the positions for his fingers on the strings.

The trouble is that few persons ever have their attention called to this matter of muscle action in connection with speech. They picked up the elementary sounds by which they must communicate their ideas, from the people about them in

childhood, without ever knowing how each sound should be made. No wonder ordinary speech is so indistinct and confused.

Constructive Efforts

Mere exhortations to "talk better" amount to little, especially with adults, whose talk has to a large degree become a matter of subconscious mental action. However earnestly a person may *try* to talk better, he will forget as soon as he becomes interested in the thing he is saying. The effort to improve the standard of speech of the organization involves:

1. Linking the process with some other one, which is mainly a conscious process.
2. Furnishing suitably devised rules and forms which may be learned and applied automatically, and which will gradually set up proper underlying habits of utterance, tone, etc.—like the steel rods of reinforcement through newly mixed concrete.
3. Consistent supervision until new habits become fixed.

The subject of speech may be presented to the employees in the light of a service activity, or it may be linked up with the subject of salesmanship. This last has been done in general terms quite often, but no one has got down to details. Many books on salesmanship contain brief exhortations to the student to "speak clearly, with a pleasant voice and clear enunciation, using tactful and forceful language, etc.," but they give no definite help. A detailed presentation of the subject of talk in terms of salesmanship, or of advertising, or of co-operation or team-work, would give the individual definite points to take hold of.

This part of the effort for improvement may easily be taken care of by giving a few addresses to the members of the organization in groups of convenient size. This should be

followed by the distribution of leaflets giving the matter of these addresses in printed form. The addresses must be simple and effective in manner and practical in substance, and must be tied up with the ordinary routine of business. They may be given either by a member of the organization or by an outsider. They will be chiefly valuable as illustrations of the results which may be obtained through attention to the rules they lay down.

Definite Instruction

The addresses should be followed by careful analysis of the part played by speech in the every-day routine of the organization. This would take up the duties of each class or group of employees, noting what they have to do in the course of their routine work, and what requirements as to speech are made upon them—for example, what is required of an office telephone operator, of an office boy or a reception clerk, of a correspondent dictating to a stenographer or to a machine.

Oral Forms

This analysis should be followed by the construction, for the use of each group, of a number of oral forms, to be used in their routine talk. Three-fifths, at least, of the daily talk of almost every worker—whatever his line of employment—consists of routine questions and remarks, which are repeated with slight variations hour by hour, and day by day. A clerk at a certain counter in a store will be asked stated questions by his customers over and over again every day. They concern chiefly the goods he has to sell, their quality, price, size, durability, etc., and also store methods and arrangements—telephone systems, charge accounts, the location of other departments. The items vary, but the frame of the question varies little. The replies which the clerk makes, throughout the day, are correspondingly uniform. The case is the same

with other employees in either store or office—elevator boys, messenger boys, office boys, reception clerks, demonstrators, adjusters, supervisors, etc.

A Method Which Works

The official talk of any one of these is confined within comparatively narrow limits. For any individual the number of such routine sentences is probably less than fifty. To instruct a large and varied force of employees in the arts of language in the old-fashioned way might be difficult and expensive, but oral forms are entirely practicable. A beginning may be made by standardizing a few of the most common sentences used by certain groups or classes of employees, and gradually adding others.

Simplicity and Naturalness

These oral forms must not be too numerous in the case of any group, and should follow, as closely as possible, the habitual mode of expression of the speakers. They should seek merely to render more efficient the natural manner of speaking of the person concerned. Extra refinement is not to be sought, but rather increased simplicity, directness, and vigor. The standards as to vocabulary, and as to arrangement of thought will be approximately those developed in good business letters.

Habitual remarks, both questions and answers, should be analyzed with regard to points of enunciation, pronunciation, tone, rhythm, melody, as well as to points of wording and arrangement. The employees concerned would then be given instructions in proper utterance of these oral forms; that is, a sort of conversational code would be prepared. The little speeches thus prepared will be roughly analogous to the form paragraphs developed in connection with letter-writing, already discussed.

Effort in This Direction

The telephone companies have done something like this. They teach their operators not merely the words to use in their official conversation with the public, but how to speak those words. The result is that when the receiver is taken down, the operator always answers in intelligent, direct sentences, distinctly uttered. The tone is not always of a pleasant quality, but the cadence is always courteous. A number of other concerns have made a beginning; department stores, restaurants, and hotels, railway companies, etc. The same thing is being done, to some extent, in the case of officials in the public service, the army and navy, etc., and of certain employees in special positions—personal attendants, waiters, nurses. In most of these cases, however, the matter has not been carried far enough, inasmuch as no instruction has been given in the utterance of the oral forms which are recommended—a matter which is most essential. Yet in some concerns, whether large or small, the matter of utterance could be attended to much more easily than in the case of the telephone girls, whose work has to be done at high speed and nervous tension.

These set phrases used in official talk would be purely automatic, of course, but they would be serviceable. Their use would be economical and beneficial in two ways. It would render a large part of the incidental speech of the organization clear, correct, and easy to understand. Indirectly, also, its effect would be very considerable. It would tend to raise the standard of the general speech of the persons using these oral forms.

Supervision

To maintain a standard of efficiency in speech, as in letter-writing, involves some sort of supervision. This may be given either by the regular supervising force, or by a special

supervisor or critic. The special speech training required in a business organization will be less extended than the training given to letter-writers. What is more important than detailed instruction is continual observation by superior officials, to insure that organization requirements are lived up to. On the other hand, the speech requirements concern, not only a few department officials as does the correspondence, but the entire body of employees. The best results would be obtained through the employment of a speech critic or supervisor.

Frequent if not continuous need of instructing new employees in the speech rules of the organization would fill a considerable part of the time of such an official. Instruction or advice of a more detailed nature for individuals needing special assistance might well occupy the rest of his time.

CHAPTER XXXVI

LANGUAGE OF THE EXECUTIVE

The Art of Expression

Men in executive positions need special command of language to facilitate the control of subordinates, and to aid in "driving the team." Clear and wise thinking is the first essential for one who must direct the work of other people, but skilful command of the medium of intercourse is hardly less essential. Often a man who has an excellent purpose in view defeats his own aim by an ill-advised manner of presenting it to the persons whose co-operation is necessary.

Especially in the intense and nervous conditions of a modern business organization this is true. In the small shop of former days, master and man, working side by side, developed team-work unconsciously. In the huge modern organization such personal contact is restricted and rare. Yet as men and masters are no more machines now than their ancestors were, personal and emotional coloring is bound to enter into all organization operations; if the right coloring is not given the wrong one will develop.

In the executive's handling of the personal and emotional elements of business relationships, the technique of speech and manner must be largely relied upon. The more able a manager is to convey his ideas through suggestion, supplementing his words by the implications of a personality which is shrewd, determined, fair, and friendly, the more successful he will be in the intimate art of management. His position requires him to be constantly correcting, reproving, and commending his subordinates. Often what he says matters less than the way he says it. The same criticism may be made in

a way that leaves the recipient furious with indignation or eager to improve.

The art of expression in ordinary intercourse has been too little studied by men who have executive duties. To rely merely on the "common sense" developed by the experience of life is not enough; it is applying the "hire and fire" principle to the most important part of official existence, the routine of every-day intercourse. Furthermore, the executive in developing positiveness and determination, may have actually lessened his power of winning support from other men. Even a masterful personality can go faster when gates are opened for him than when he has to crash through walls. The subject has been touched upon here and there in certain emotional discussions of "personal efficiency." But there has been little attempt to work out its applications in a sober and clear-sighted way. Space permits here of merely touching on a few points.

Dictating

The books on letter-writing say little about the actual process of dictating. They speak of correct wording and grammar, clearness and logic, conciseness and courtesy, etc., but they seem to assume that a man will know how to say what he wants to say. This is not the fact with most men. To talk connectedly on any subject is not easy. It is especially hard to do when one is talking, not to the person aimed at, but to a third person. In actual conversation we have the support of the listener's response. We know when he understands, is pleased or displeased, or has had enough; but in dictating we must rely entirely on our own imagination and dramatic sense. As a result most dictation is not conversation but monologue. The speaker expresses himself in a manner very different from that he would use if the person to whom his letter is addressed were actually present.

The essential principle for dictation is concentration on the recipient of the letter. The letter is really a *talk to him*, and not a *talk about the subject*. The thing to keep in mind is not so much the logical development of the idea as the way in which that particular reader can best take up that idea, and this differs in every case. The letters of some dictators read all alike, but the letters of the person who has really command of language vary widely according to the individual to whom they are addressed.

Two Styles of Expression

There are two sharply different styles or methods of expressing oneself in writing. When the first style is followed our letters consist of a series of distinct remarks—separate little blocks of thought, perhaps of a single sentence, perhaps of two or three—which are practically complete in themselves. Cyclopedias are written in such a manner, also text-books and office manuals. This style of expression has the merits of sententiousness, definiteness, precision. Its defects are that it is cold and dry, and there is little connection from part to part. Writing of this kind is like a mosaic—made up of little bits of glass absolutely distinct. For orders, however, and for impersonal writing, where clearness and exactness are the qualities chiefly desired, this style of expression is best.

The second style is that of connected talk. The ideas do not come in complete little blocks—they flow on from one sentence to another, much as they do in ordinary conversation. The unit is not the sentence but the paragraph. The defects of a style such as this are obvious. It may be inexact, it is not unlikely to be wordy or thin. No one would write a telegram in this manner. But its merits are just as evident. It has vitality, movement, coherence, it is easy to read, and runs along like conversation.

For most occasions, particularly in letter-writing, this second style is best. Although it may be longer and less precise, it seems more human than the other. It holds the interest of the reader, which is the great thing after all. For all writing which seeks to convey suggestion, to touch the emotional side of the reader at all, this method is better. The first style is fundamentally cautious. Things written in that way seem always to have been revised. The reader is instinctively on his guard. But a letter or notice expressed in the second manner seems to have come straight from the lips of the speaker.

The dictator should compose his letters, on the whole, by the second method. He should be as careful as possible to avoid errors in thought and in expression, but he should put his attention on getting over the ground rather than on minute precision of form.

Talking to a Dictating Machine

The most interesting development in recent years in connection with correspondence has been the introduction of the dictating machine. Its scope is not yet appreciated. It is likely to bulk almost as large as the telephone in business, in the future. It is a significant fact that the keenest interest in the better-letter movement has come from concerns whose correspondence is done almost wholly by means of the machine. Many men fail, however, to get the most value out of the machine because they do not "play on it" in the right way.

The dictator should remember, when using the machine, not to try, at least at first, to keep up with the machine but try to utter his thoughts at their *usual rate* of expression. Everybody is tempted to keep talking as the machine runs. The result, in such case, is language that is wordy, thin, and ineffective.

Talk at a Normal Rate

Thoughts come to us, as a rule, not in a continuous stream but in waves, or leaps of the mind. Sometimes the process is like that of single drops forming and falling. But the slowness of the ordinary methods of recording, whether writing longhand or pounding it out for oneself, or even dictating to a stenographer, has both lengthened the intervals between thoughts and made them unnaturally regular. Even when our thoughts actually come faster we must wait, after each one, till we can *get it down*, as a delivery wagon must wait while each parcel is carried in.

The dictating machine makes possible a large increase in the speed of composition if one goes about it with care. A beginner should try to keep his habitual rate of formulating his thoughts. Suppose that when using his habitual medium of composition, whether (1) writing in longhand, or (2) typing for himself, or (3) dictating to a stenographer, each "thought" takes, on the average, one minute to get out of his mind. When using the machine that thought will be uttered in about four seconds, leaving 56 seconds to wait before another thought is due in the brain.

One of the chief points to be remembered is not to hurry, but *wait* until it is time for the second thought to present itself, then utter it and wait in the same way for the third, and so on. This will prevent diffuseness. After a while, however, the dictator will find that when thoughts *do* occur at shorter intervals, or even continuously, he can get them down as fast as they come. He is never halted by the stenographer asking what he said and how to spell it, nor by his own doubt whether what he said is intelligible. Moreover, when using the machine the rate may be varied at will from moment to moment. A few words may be spoken slowly and hesitatingly and a moment or so later they may rattle off fast and eagerly; the machine will catch them all.

Talk Expressively

The dictator should let himself go, as to tone, speed of utterance, expressive manner, etc. The effort to talk to a stenographer in language which is conversationally correct, proper, strong, etc., takes the vitality, life, and charm out of most voices. There are few people who can be deliberately cautious in choosing and building up their words and yet have the words exactly linked as the words of conversation nearly always are. With the machine—after the first strangeness is past—the dictator is much more at ease, so that he gets the advantage of his natural way of binding words together.

In one's first experience with the machine one is apt to talk in an extravagantly loud voice, rather high-pitched, running along on a level. That is not necessary. The best results come when you talk distinctly but with varied intonations as in animated conversation. One man who does a great deal of special writing, turning out a surprising quantity of copy of very good quality, talks to the machine in the same lively and vivacious manner that he would use in conversing. I doubt very much whether he could get the same effect of naturalness, clearness, and liveliness in dictating to a stenographer.

Visualize the Sentence

One valuable rule which applies to all dictation is this: Don't begin a sentence until you see where you are coming out. Try to pick definitely the word which will close the sentence. This simple rule will put an end to most of the hesitating and "er"-ing which injures the talk of most of us. Wait as long as you please between sentences, but once you begin the sentence go straight through. This plan gives directness of style; when one sees light ahead one can walk straight toward it. It aids both in coherence of thought, and in variety and correctness of expression. The average

man, though he may hesitate, is averse to retracing his steps. This is a psychological fact that contributes to the effectiveness of the machine. Closer concentration of mind takes place, the formulation of sentences is made easier and more rapid because of this disinclination to retrace.

Length of the Letter

Practice in using the dictating machine gives the dictator a very definite sense for the right length of the letter or statement just as a runner learns to know his distance. The scale on the machine guides his eye. He knows also that the cylinder will take from 1,200 to 1,800 words, according to the rate of his own talk. He learns to tell a tenth, or a fifth or fourth of the cylinder automatically, and to space up his letter or his manuscript within these limits.

Technique of Dictation

Careful attention from the outset to certain points of mechanics will facilitate the work of both dictator and transcriber. Technique counts here exactly as in pitching a ball. The mouthpiece should touch lightly the upper lip. If too near the mouth the sound will be too noisy. The similarity in sound of certain letters of the alphabet, such as t, b, e, v, d, will tend, unless care is taken to pronounce them very carefully and clearly, to confuse the operator and result in incorrect transcription. Any confusion may be avoided by using a proper name after a particular letter, such as D for Daniel, V for Violet, E for Edward, B for Barney, etc.

The dictator should use care to pronounce clearly, and, with the exception of perfectly familiar ones, spell out proper names. In the same way when using combinations of numbers it is well to pronounce them as in the telephone, thus 1898, for example, would be stated one-eight-nine-eight, etc.

Conversation

A large part of the executive use of language is what may be called "directed conversation." Much of it has to do with adjustments of one or another sort. There are questions to be answered, points to be explained, complaints to be settled, etc. There is correction or stimulus to be given to subordinates, largely by means of casual conversation. It may seem that a man will know by instinct how to give the right expression to his ideas in conversation just as he knows how to eat his dinner, but that is not the fact.

Speech is so intimate a process that we fail, most of the time to realize what we are actually saying. We need to become aware of how we are talking, yet the technique of business speech must be unobtrusive. If showy, or elocutionary, or extreme in any way, it is bad. If it seems affected it provokes suspicion and resentment. When so much counts upon the little points of manner, a skill which is easy and automatic is very worth while developing.

Explanations to Subordinates

In giving instructions to under employees the important thing is to make all statements clearly and exactly, but make them in language which is vivid and not too involved. It is well to repeat an important fact twice or perhaps three times in different ways. Many people have only a small range of words that are really familiar. If words are used that they do not understand they gather nothing from the statement. By repeating the thought something will probably be reached which is within the beat of their minds.

Explanations to upper officials are made in an entirely different way. Here the essentials are, first, to give the right slant and stress to proper points; second, to present the matter with sufficient tact, using suggestion rather than explicit command. The most difficult thing is to know when

enough has been said. To stop before that point results in not being clearly understood. To go beyond that point might provoke the person whose support is desired. In this connection, therefore, the manner of speaking has a great deal to do with success. The person whose voice is flexible and expressive can say a great deal by means of his intonation.

Conferences

In some ways the conference between persons of equal rank is the most difficult sort of interview. Time is almost always wasted; to hold to the point is difficult. The executive who would get the most possible out of his conference must know how to talk and how to guide the conversation skilfully and unobtrusively. He must keep things moving, must recall the conversation when it rambles, head off possible disputes that do not bear on the subject, and avoid unnecessary personalities. It is a situation which calls for active tact and frank impersonality in one's manner of presenting ideas.

Public Speaking

Readiness in public speaking, connected talk to a group, is a great help to the executive. In handling people, what seems like two plus two does not by any means make the expected four. Emotional elements enter in and modify the equation. An impression given to a group of persons together is apt to be more powerful and better kept in mind than if given to the same persons individually. Things can be said to a group of people more plainly and more stirringly than would be good form in talk with individuals. The address to a group or a large body of persons is not the occasion for presenting or developing a new idea. That should be done in conversation. The address should seek to clinch the subject which has already been introduced and explained to the hearers individually.



PART VII

WAGES AND INCENTIVES TO EFFICIENCY



CHAPTER XXXVII .

PRINCIPLES OF WAGE PAYMENTS

The Importance of the Wage Question

In every business the point of greatest friction is centered in the question of wage or salary. The employee usually wants more money than he is receiving, and the employer hesitates to give it because of rising costs. While it is natural that the attention of both parties should be focused on the matter, it is unfortunate that employers have not looked further into the employment relationship and seen that the friction is due as much to inequalities of pay as to demands for more pay.

If two departments are really doing the same *grade* of work, but the employees of one department are getting 20 per cent more money for it, the discontent is not caused by the amount of salary paid, but by the inequality between work and reward. Any attempt at reducing this kind of friction through the lubrication of salary-raising is as likely to cause slipping as to reduce the heat, by "raising" the wrong people. The trouble largely arises because of the office manager's ignorance of conditions and a lack of standards by which to measure efficiency. He decides increases by sentiment and guesses, instead of adjusting the salaries of the workers on the basis of their relative merits.

The Necessity for Standards

Thus, the equality of employees' salaries depends upon the adoption of adequate standards. The old standard of the "market value" of an employee's worth is becoming inadequate to meet the finer measurements needed in today's salary

adjustments. New standards are demanded and business men are establishing them by examining the elements of production, rather than relying alone upon the vague determinants of "the market demand for labor." In other words, business men are seeking a standard for measuring labor worth or wages—standards which have as few variables to contend with as possible. As explained in Chapter XXX, standards by which to measure the employee's ability when hiring him may be obtained through job analysis on the one hand, and by mental, physical, and moral tests, on the other. But if the employer drops the problem here he might just as well have never begun its solution. Getting the right employee is only half—the other half is *keeping* him and keeping him in the right place. To do this it is necessary to measure his efficiency as a producer and adjust his wage accordingly. The new standard, therefore, for this purpose must be based on the measurement of the product turned out both as to quality and quantity.

The Road to a Rational Wage System

There is no short cut to the solution of the wage problem. Before a rational system can be found for any concern every job must be studied with a view to standardizing, so far as is possible and practicable, all equipment, conditions, and methods connected with it.

Usually the first thing to be considered is the physical arrangement of the desks and chairs of the clerks or operators; next, the conditions surrounding the job, such as location of supplies, and aisle space; and finally the study of the operations performed by the employee in doing the work. This may take altogether months or even years. Usually a preliminary survey shows that a large number of jobs in the office can be eliminated from any scheme which involves the payment of a bonus, or can be put aside at least until the

jobs better adapted for the application of one of the modern systems have been treated.

For example, it is possible to standardize the typing of letters and establish a bonus system of payment in the typing department, long before the correspondent's work or dictation of letters can be adjusted to such a system. The difficulty which arises here is typical of a great number of office or administrative positions. Creative brain work is difficult of analysis and classification. The inventive genius in the engineering department never works on a piece-rate basis. Indeed, the thinking required in some of the minor office positions contains so many elusive elements that standardization is almost impossible.

Another class of employees whose work cannot be readily standardized are those whose duties vary widely from hour to hour. It might not pay to bring these into a standardized system of bonuses, since the work required to standardize each job would take too long and the cost connected with the inspection and records would be too high. However, as time goes on the jobs where the same clerks act as typists, file letters, make bookkeeping entries, etc., may be grouped, and the employees brought into the system.

The above examples show that the first problem of standardization is the selection of those jobs and departments which yield most readily to treatment. It is impossible to give all the characteristics by which elimination may proceed most readily; but in general the jobs which present the most favorable conditions for standardization are those which employ continuously a comparatively large number of people performing the same kind of operations, and where the operations themselves are of a routine nature or depend upon the handling of some mechanical contrivance. For these reasons the typing and mailing departments have usually been favorite fields for the starting of systems of control and payment.

The Basis of a Fair Day's Pay

All systems of wage payment start with the same basic idea—a fair day's pay for a fair day's work. Just what constitutes either of these no one seems to know, yet the principle has served as the basis of wage adjustments for generations. Perhaps the very indefiniteness of the terms has been its greatest virtue, enabling men to interpret it in harmony with the social judgment of the particular time and place. Surely the 18 hours' work for a wage of 10 cents a day, which is customary with the lascar of India, would hardly be considered a fair deal by the American stevedore with his 10 hours and \$5 a day. Yet each may be thought fair in his own particular time and place.

What makes these things as they are cannot be discussed here. Suffice to say that what constitutes a "fair day's pay" is the outgrowth of broad social movements whose adjustments are welded into place by powerful economic forces, which once fixed, are difficult of change. Twelve dollars a day for ordinary labor in army cantonments is not now considered "fair." Even the laborers feel that it is only temporary, and they measure their good fortune in terms of the difference between the old \$3 a day and their present wages. Yet, it is not impossible that this higher rate of wages may become the basis of a social judgment of what constitutes a fair day's pay after the war, when the great economic forces of higher living standards, inflated currency, labor shortage, and expanding trade will probably have changed our ideas of the worth of a dollar, and the value of a day's work.

Employment of somewhere between 8 and 10 hours' duration has been taken as the basis of a fair day's work and wages varying with the requirements of the job, as for example, \$8 per week for an office boy, \$12 for a stenographer, \$15 for a ledger clerk, etc., have usually constituted the basis of a fair day's pay. When the clerk gets into the habit of

making so many entries, and the typist of writing so many lines per day, and when the employer acquires the habit of paying the "usual salary," it takes a great force to change these attitudes. But business conditions are continually shifting and business men find it necessary to make adjustments to meet them.

The Basis of a Fair Day's Work

One of the great changes which forced business men to revise their opinions about wage systems was the enormous growth of the size of the operating side of business. It became necessary to employ hundreds of clerks, typists, and bookkeepers instead of a half-dozen or so. The management was confronted with a new condition in which it was impossible to determine whether or not the employees were living up to the standard of a fair day's work. There were too many employees for the type of supervision called for under the day-wage system. It was necessary either to increase the supervision, which was very costly, or to induce the employee to work more conscientiously and efficiently through a change of system of wage payment. The method adopted was the piece-rate system whereby each worker was paid, not according to the number of hours he put in at his desk, but according to the amount of work (the number of pieces) turned out per day.

The change involved here is only realized when it is considered that the responsibility for obtaining a fair day's pay is shifted from the employer to the employee. The driving force is no longer the supervisor, but the employee's record. However, the straight piece-work system does not change the idea of what constitutes a fair day's pay; it only shifts the responsibility for obtaining it. The employee may still get \$2 per day, but it is paid to him because his record shows that he turns out 100 pieces of work at the rate of 2 cents a piece

within the work period of 8 hours. The effect of this change of method of computation is illustrated below.

Effect of Piece Rates on Output

Supposing the old day rate was \$2 and the old rate of work was 100 pieces per day, and that these constituted a fair day's work for a fair day's pay. As office conditions changed by an increase in the size of departments and in complexity of work, the employees found opportunities for dropping their output from 100 pieces per day to 50. To be sure, such a condition showed up sooner or later in the increased cost of production and the manager tried to correct it; but to no purpose. The cost of supervision increased faster than the efficiency of the operators. As he did not succeed by using the old methods intensively, the manager then looked for a method whereby the responsibility for poor work or short measure might be checked against each employee's work.

Upon investigation, say that he found that his new system must provide for a fair day's pay, \$2, and that the employees must produce at least 100 pieces per day of 8 hours, to justify this amount according to customary standards. He, therefore, adopted the same day rate and the same time periods, and the same customary output as the standards for his new method, but he said: "I will pay by the piece and not by the day." From that time on, the employee worked for 2 cents per piece instead of \$2 per day. The change in point of view was not only revolutionary but magical in its effect. The employee's attention was fixed now upon the product, his output, instead of upon the time.

The effect showed at once in the great increase in output; instead of 100 pieces per day the worker turned out 200, and in many cases much more; this meant, of course, that the employee began drawing wages in proportion to output—\$4, \$5, and more per day! This was shocking to the employer's

idea of a fair day's pay (\$2). So he cut the rate from 2 cents per piece to 1 cent. Now it was the worker's turn to be shocked. Working twice as hard as in the old days and drawing the same wages! He then fell back upon the argument of a fair day's work and left his job or began the debilitating practice of "soldiering."

Effect of Cutting Piece Rates

As a consequence of rate cutting the employer found himself back where he was at the beginning—with this difference—he now had added to his old troubles the distrust of his employees. However, the employer had learned that the piece-rate method would increase his output if used rightly, and in his attempts to adjust it to the new conditions imposed upon industry by trades unions and the employees' general distrust of the piece-rate method, he struck upon two new procedures by which to bring the piece-rate principle back into use. To allay the distrust of the workers he proposed to give them the usual day rate of pay, no matter what amount was turned out, but he gave them the alternative of working on a piece-rate basis, if they so desired. Thus a man working at \$2 a day would be sure of his daily income of \$2, whether he made that 100 pieces or not; but if he wished to get more than \$2 per day he must turn out over 100 pieces, for which he would be paid 2 cents a piece.

Combination of Day-Rate and Piece-Rate Methods

To protect himself, the employer made a close study of the amount of work that should be considered as a fair day's output. He found that in most cases a fair day's work was not fair under the stimulating conditions of a piece-work system, and that accordingly the rate per piece should be carefully set at a figure somewhat lower than the rate obtained by calculations based on the old day rate and the average output under

that system. Thus, to revert to the former illustration, instead of offering his employees 2 cents per piece without limit as to output, he now put them on a piece-work basis by paying them 1 cent per piece, his study of the case having shown him that the making of 200 pieces per day did not call for more than ordinary exertion and that 250 or 300 pieces could be made without overworking. But whatever the employee's production, he was assured a wage of \$2 per day. In many cases this offer was reinforced by a published statement to the effect that no piece rates would be cut unless the job itself was changed by the introduction of new machines or processes by which the present amount of labor required was greatly reduced.

If the piece-rate method could have stopped at this point and its effectiveness developed by an application of scientific methods to job analysis with all that this implies, the wage question would have been much simplified. But such a procedure would have meant that great prejudices would have had to be overcome. Business men dislike long investigations. They fear that business conditions which are ever changing may so alter the face of things, that the need for the remedy will have passed before the cure is discovered. There is only one thing they are certain of, and that is an increased overhead expense! Therefore, as new questions have arisen concerning wages, employers have sought to meet them by some modification of the present system of piece-work payment without tackling the fundamental problem of "measuring the employee's output."

Unless careful provision is made for the constant examination and revision of the piece rates, they soon become as inflexible and unresponsive to the changes of employment conditions as the old customary day wages based on a fair day's work. Wage conditions fluctuate rapidly, and in a short time the demands of labor for more pay, or the changes in

productive processes requiring less labor, will throw any system of piece rates out of alignment.

As a consequence the friction between employers and employees has constantly increased, and in an attempt to alleviate the strain, the employer has sought to placate the laborer's demands by offering him a bonus in addition to a fair day's pay.

The Principle of Bonus Payments

A bonus is a payment over and above the regular salary for extra services rendered. It is not a gift. The Christmas bonus has long ceased to be considered a Christmas present. The employee always capitalizes it when bargaining for a new position, and the employer charges it to insurance against a too high labor turnover. Employees dislike to leave a position before the end of the year and hence lose their bonuses. If this definition is correct, the amount of the bonus should hold some relation to the value of the services rendered, and herein lies the clue to a correct method of figuring the bonus. Unless the bonus is given arbitrarily, as illustrated in the following section, without regard to the work performed, it should be based on some element of productive service.

Example of An Arbitrary Bonus Payment

The bonus method of J. H. Williams and Co. is typical of a large number of arbitrary bonuses which have been given during the war period, and illustrates an attempt to adjust wages on the basis of "business conditions" without changing the customary or established daily or piece-rate wage. The method may be explained by quoting the concern's announcement to its employees:

In view of the increased cost of living, due to abnormal world conditions, and as an expression of appreciation of the loyalty of their employees, J. H. Williams and Co., Brooklyn and Buffalo, N. Y., have placed in operation a system of

bonus payments for their entire organization which comprises more than 1,000 men. The provisions of the system as announced to the employees December 22, are as follows:

Bonuses will be based on 13 weeks' pay at a time and paid on the next following pay-day to all men in the company's employ at that time. Thus, the first bonus will be paid on April 7, based on the pay-rolls from January 6 to March 31, inclusive, and thereafter the bonuses will follow 13 weeks apart, for as long as the present abnormal business conditions shall permit, subject, however, to the company's option to discontinue the system at any time upon giving notice to that effect. The normal rate of the bonus based upon the rate of pay will be as follows:

1. Weekly or Yearly Pay
 - (a) Less than \$1,250 per year, 10 per cent.
 - (b) Equal to \$1,250 but less than \$2,000, 7½ per cent.
 - (c) Equal to \$2,000 or more, 5 per cent.
2. Hourly Pay
 - (d) Less than 45c., 10 per cent.
 - (e) Equal to 45c. but less than 60c., 7½ per cent.
 - (f) Equal to 60c. or more, 5 per cent.
 - (g) Bonus for all piece work will be figured at 5-per cent, including overtime.

The proportion of the normal rate earned by each man will be the ratio between the number of hours he works and the full number of regular shop hours operated in his department, exclusive of overtime. Thus, if the department runs 54 hours of regular time, a man working 50 hours of regular time will receive credit for 50/54 of the normal rate for the hours he actually works. No bonus will be paid on overtime where time and a half is paid; this is a 50 per cent bonus of itself. Any man who is laid off by the company (not discharged) will be paid his bonus immediately for the full time of his past service, but no bonus will be paid to those who shall have voluntarily left the company's employ.

Methods of Figuring Bonus Rates

The above method of bonus payment is arbitrary, in that it is based on salaries regardless of differences in service rendered by employees receiving the same salaries. There are two prime ways in which this service may be considered: (1) in terms of the time taken to perform it, and (2) in terms of the quantity of product. The first gives a day-work, the

second a piece-work basis of figuring earnings. The sound method of figuring is based on a combination of the two.

The major factors in figuring earnings are time and product; that is, services must be rendered through a period of time and in connection with material goods or product. The services of a stenographer are rendered throughout the *day* in writing *letters*. These two factors are always present in any system of bonus payment, but for special reasons one or the other is always chosen as a basis on which to compute the percentage of bonus to be paid. Sometimes the rate is reckoned on salary basis, but this does not change the real nature of the problem—a salary is simply the money terms in which is measured the value of these services.

An example will make this clear. A stenographer writes 100 lines per hour. The standard work for the department is 90 lines per hour, the regular salary for which is \$8 per week. If the company pays a bonus, on what basis should it be reckoned?

It will at once be seen that the work of the stenographer who writes 100 lines per hour may be thought of as rendering a service to the company, whether by saving time (since she was able to write 90 lines we will say in 54 minutes, thereby saving 6 minutes on the task, according to the standard set by the company) or by increasing the output of letters (since she wrote 10 more lines than was required).

If the time element is chosen as the basis of measuring the service, the bonus rate should bear the same ratio to the regular salary as the amount of time saved to the standard time.

Standard time.....	60 min.
Actual "	54 "
	—
Time saved.....	6 "
	$6 \div 60 = 1/10$ or 10%
Regular Salary = 15c. per hr.	
∴ Bonus	$= 15c. \times .1, \text{ or } \0.15

Time gained by operator, times his regular hourly rate, times proportion of gained wage time granted the operator ($\frac{1}{2}$ in this case), plus the regular hourly rate times the time actually consumed by the operation, divided by the time consumed in production. The formula of this would be:

$$\left[\frac{1 \times .35}{2} + (.35 \times 9) \right] \div 9 = .367, \text{ the premium rate per hour}$$

It is objected that the workman receives less for his efforts under this plan than from straight piece-work, but its advocates insist that this is more than balanced by the guaranteed day rate while learning and when poor dispatching or poor grade of material cause low production.

The Taylor Differential System

The best example of a system which emphasizes the importance of the product turned out by using time as the basis for computing the bonus, is the Taylor differential system. This is a piece-work system with two or more prices placed upon the same job, the maximum price being allowed when the maximum quantity is turned out within the period set, and the smaller price being given when the quantity made is below the standard set. Mr. Taylor's formula for wages—"high or low piece-work price times the number of pieces"—shows the elements considered. The following example will illustrate this:

Rate: Low rate 25c. each; high rate 27c. each.

Conditions: Limit of high rate 12 pieces per day.

Problem I: Output 10 pieces; wages 10 times 25c., or \$2.50.

Problem II: Output 12 pieces; wages 12 times 27c., or \$3.24.

Two Possible Bases—Time Saved or Pieces Made

One or the other of these methods is fundamental in bonus systems. Any variations in the formulae are due to necessary adjustments between the employer and employee because of the time saved and the product gained during the process of

production. It is not fair to credit all of the time saved solely to the employee. This modification of the principle is one of the chief characteristics of the Halsey bonus system.

Those organizations which choose the adoption of the time element as the basis for estimating efficiency and bonuses may have one of several motives in mind. In the first place the manager may not have a very accurate knowledge of the real working capacity of his men or of his department. He arrives at his standard day's work by going over the records of the past year or two, and from the outputs registered here he strikes a general average. He knows the workman can beat this if he tries, but by how much he cannot tell. By emphasizing the element of time saved instead of the number of pieces made, the manager focuses the attention of the employee upon the rate of pay per hour, rather than upon the rate of pay per piece. Consequently, when it becomes necessary to alter the standard number of pieces made per hour the change does not emphasize the idea of a cut in piece rates. This permits the manager to make adjustments without undue friction and so correct errors of judgment made in setting the rates in the first place.

Without waiting, therefore, for a complete analysis of the labor situation in an organization, the manager may start a bonus or "incentive system" that will pay the operator a fair return for his efforts on a percentage basis, based on the relation of the time saved to the time allowed. In the meantime steps may be taken to standardize conditions, methods, routing, and planning, and so more accurate time schedules and closer adjustments of wage rates may be arranged.

Rowan Method of Bonus Payment

Some concerns protect themselves from fundamental errors in the setting of piece rates by the Rowan method of figuring bonuses. This system is a modification of the bonus

scheme in which a time allowance is made in a manner similar to the Halsey plan, but the bonus, instead of being figured as a definite percentage of the time saved, is figured by multiplying the time actually taken, by the ratio of the time saved to the time allowed. For example, suppose a job with a time allowance of 8 hours is finished in 4 hours. The bonus allowed would be $4 \times 4/8$, or 2 hours' pay; the wages for the 4 hours' work being the standard hourly pay multiplied by 6 hours,* instead of 4. In this case the bonus would be similar to that earned by an operator making the same time and with the same time allowed, under a 50 per cent Halsey bonus plan. However, supposing the allowed time had been far too great, and the operator finished the job in 2 hours, the bonus would be $2 \times 6/8$, or $1\frac{1}{2}$ hours, which would correspond to only 25 per cent under the Halsey plan.

The use of a system which emphasizes the quantity, rather than the time, in figuring a bonus, demands that a thorough analysis be made of each job before a standard rate of output is set. The attention of the worker is fixed directly upon the piece rate; every piece means so much cash to him. Mistakes in setting piece rates or the correct number of units to be turned out in a given period are difficult to change. While close time study is coming to be part of every method of compensation, its necessity has always been insisted upon by those who emphasized the quantity rather than the time elements in bonus systems.

*Formula for Rowan wage has been constructed as follows:

$$\text{Wage} = \text{wages of time used} + \left\{ \frac{\text{wages of time saved}}{\text{wages of time set}} \times \text{wages of time used} \right\}$$

If in the example given above 8 hours is the standard time and \$2 per day or 25c per hour is the guaranteed rate, the premium for doing this work in different periods of time would be as follows:

Actual Time	Wages of Time Set	Wages of Time Saved	Wages of Time Used	Premium for Time Used
8 hrs	\$2.00	0.00	\$2.00	0.00
7 "	2.00	0.25	1.75	0.21875
6 "	2.00	.50	1.50	0.375
5 "	2.00	.75	1.25	0.46875
4 "	2.00	1.00	1.00	0.50
3 "	2.00	1.25	0.75	0.46875
2 "	2.00	1.50	0.50	0.375
1 "	2.00	1.75	0.25	0.21875

In some places the value of the product, as compared with the time spent in producing it, is so great that the time element can be neglected almost entirely. Instances of this kind are found in the drawing up of contracts, figuring out collection methods, and the like. If bonuses are set for such work, neither time nor quantity must be stressed too much, but rather the quality of the product, which may be judged on the basis of freedom from error, or the number of collections resulting from the effort.

CHAPTER XXXVIII

BONUS SYSTEMS IN THE OFFICE

Bonus Systems Promote Efficiency

In many large offices where the routine work has been standardized, the bonus system has been applied to the payment of salaries for the purpose of raising the standard of work and promoting office efficiency. It is obvious on the face of it that the employee whose output is half as much again as the average in his department for work of the same character, should receive some reward for his industry. It is also obvious that given an adequate incentive employees will try to become more efficient.

The experience of a well-known publishing concern, the office pay-roll of which totals \$8,000 weekly, is that the average office help working under average conditions does not produce 50 per cent of the output which is possible when duties and routine are standardized and incentives are offered to reach and surpass the standard set. This statement applies to clerks and machine operators alike.

A further advantage of the bonus method of salary payment is that, instead of tending to increase errors and mistakes as might be at first expected considering the extra pressure that is put upon workers, its effect is to decrease them. Mistakes are largely due to a slovenly attitude of mind toward one's work, bred by indifference, lack of interest, and no incentive to concentrate on the job. The standardizing of jobs and their payment and the reduction of mistakes to a cash basis, does away with much of this. Employees can be relied upon to make twice as many errors or even more, when they have no idea of the money value of the

mistakes. But when this is brought home to them either by means of the merit and demerit system described in Chapter XL, or by means of a bonus method of payment, the time and trouble of devising and supervising these systems are more than compensated by the quality and quantity of the output.

Form of Payment of Bonus

A bonus is a payment or reward over and above the regular salary for extra services rendered. Usually this reward is made in the form of a cash payment, measured by the amount of work done in excess of the standard set for the salary paid. The reward, however, need not necessarily be in hard cash. One large manufacturing concern offers its office employees whose records for output, accuracy, and punctuality are high, a bonus for their efficiency in the form of a weekly lunch ticket for six noon-day meals in the well-equipped restaurant in which meals are provided for the employees. Each meal has an estimated value of 50 cents and the ticket for work well done is enclosed in the pay envelope. The bonus in this case appears to exercise a dynamic effect upon the office force, for, according to the office manager of the company, "It is surprisingly easy to stimulate employees' ambition and improve their efficiency by an appeal to their appetite and indirectly, to their pocket-books."

In general, however, the bonus plan is based on an extra payment for the attainment of the standard set. If employees do not reach the standard, no deduction is made from their salaries. It is from this angle that the subject is to be considered in this chapter.

The Necessity of Grading Salaries

One of the easiest ways to attack the problem of introducing an office bonus system is to grade the salaries in accordance with the responsibilities and difficulties of the dif-

ferent classes of work, and then determine what should be the average output of work for each class. Inequalities in the salaries paid for much the same work are to be found in almost every large office. They arise partly from the practice of rewarding length of service regardless of the quality of work, and partly from the hit-or-miss methods of granting increases to those who curry favor with executive heads.

The co-operation of employees can never be obtained in an effort to increase output, if half a dozen or more workers doing precisely the same tasks or grades of work are paid at different rates. The correction of these inequalities of salaries before a bonus system is installed is very necessary, since any increase of pay only aggravates the differences which are resented by employees, and which are so detrimental to their co-operation and good-will.

Several of the leading factory bonus systems are used successfully in offices in modified form. W. H. Leffingwell, the well-known expert on office management, has evolved a combination method, made up of the Taylor and the Emerson systems, which is described in his work "Scientific Office Management," as follows:

"1. Determine the general average salary paid for this operation.

"2. Determine the maximum amount the company is willing to pay for 100 per cent efficiency. In this connection it is well to consider also the minimum amount of bonus which will be an incentive to the employee to reach 100 per cent.

"3. As will be seen from the table, the bonus for 100 per cent efficiency is 50 per cent of the standard wage. Therefore the standard wage, plus 50 per cent, should equal the maximum sum it is desired to pay for 100 per cent efficiency. That is to say, the standard wage should

be two-thirds of the maximum, and the bonus for 100 per cent efficiency one-third.

"4. Establish a "standard salary" for an operation. By this I mean a sum of money upon which to figure the percentage of bonus. This sum should closely approximate the general run of salaries paid for this operation, but not necessarily so. The only purpose of this standard salary is to figure the bonus, and it does not mean that if a clerk is getting more than the standard salary or less he is to be reduced or raised to the standard. The object of having a standard is to make the clerical work of figuring the bonus more simple.

"5. The following sliding scale runs from 68 to 100 per cent efficiency:

Per Cent Efficiency	Per Cent Bonus	Per Cent Efficiency	Per Cent Bonus
67	0.0	84	13.0
68	1.0	85	14.0
69	1.4	86	15.0
70	2.0	87	16.0
71	2.8	88	17.0
72	3.4	89	18.0
73	4.4	90	20.0
74	5.2	91	22.0
75	6.0	92	24.0
76	6.6	93	26.0
77	7.2	94	28.0
78	8.0	95	30.0
79	8.8	96	32.0
80	10.0	97	34.0
81	10.4	98	36.0
82	11.2	99	38.0
83	12.0	100	50.0

"On everything above 100 per cent efficiency the bonus is equivalent to the rate per piece at the 50 per cent bonus. For example, if the standard salary is 20 cents an hour and the standard 200 per hour, if the clerk does 300 per hour the bonus would be figured as follows: 50 per cent of 20 cents is 10 cents, which bonus is paid for a production of

200 per hour; therefore this is at the rate of 5 cents per hundred, and if a clerk does 300 per hour he gets three times 5 cents, or 15 cents, bonus per hour.

"With this method the cost per piece is reduced as the quantity increases and the clerk gets adequate reward for increasing efficiency."

Example of Grading Salaries.

An interesting method of adjusting salaries to the grade of work done and thus eliminating inequalities of payment is illustrated by the procedure adopted in the office of the Willys-Overland Company of Toledo, Ohio. In this office all work is graded and put into certain classifications to which appropriate symbols are given. A basic wage is assigned to each classification and at the end of the first and second years a definite salary increase is paid automatically, the increase depending upon the amount paid in each class. Thus each employee knows that he will receive the same pay as others for the same responsibility and the same kind of work.

When the positions were first classified, the names of persons holding them were assembled and the salary rates inserted. This grouping brought out the inequalities. "It was conceded," says L. A. Miller, the office manager, "that such inequalities existed for positions of similar importance in different departments, but it was not thought that they could possibly be so prevalent within the departments themselves."

After the classifications were completed, a basic rate was determined upon for each class. Finally, the question of a general increase of salaries was taken up. The classification and the basic rate under each, helped to direct the application of the increases with fairness. Not all men, for instance, in the same classification got raises. Many were getting

CLASSIFICATION OF WORK AND SALARY RECOMMENDATIONS									
Basic rates from \$35 to \$60, increase \$5 at end of 1st and 2nd year; from \$65 to \$95, increase \$7.50 at end of 1st and 2nd year; from \$100 to \$125, increase \$10 at end of 1st and 2nd year. These recommendations to cover present salaries up to \$2,000.									
Department		SUPPLY		Classification D				Basic Rate \$55.00	
NAME	POSITION	ENTERED EMPLOY		SALARY CHANGES		RECOM-MENDATION	REMARKS		
		Date	Rate	Date	Rate				
1. Dec, John	Mail Clerk	1/1/16	\$40.00	4/1/16	\$55.00	\$ 5.00	Credit 1 year		
2. Clark, William	Stock "	8/1/16	40.00			15.00	Receiving maximum		
3. Green, Charles	Parts "	1/1/15	55.00	1/1/16	60.00				
	Stock "			7/1/16	65.00	5.00			
4. Hubbard, Frank	" "	9/1/16	50.00			....		
5. Jones, Alex	" "	9/1/16	55.00			10.00			
6. Lamar, Henry	" "	1/1/14	50.00	1/1/15	55.00	5.00	Credit 2 years		
7. Mills, George	" "	12/1/16	50.00			....		
8. Smith, John	" "	12/1/16	55.00			5.00			
9. Thomas, James	" "	11/1/16	50.00						
10. Unger, Charles	" "	1/1/15	40.00	7/1/15	45.00				
				1/1/16	50.00				
				7/1/16	55.00	10.00	Credit 2 years		

Figure 85. Salary Classification Sheet

The notation at the top has an important bearing on future salary adjustments.

already a rate in excess of the basic rate of their group. They, of course, received no increase. Others, it was discovered, were getting salaries below this basic rate. These were brought up to the rate of their class regardless of the general salary increase. In a few cases the leveling up process called for a $33\frac{1}{3}$ per cent increase in wages. A study of the classification sheet (Figure 85) showing salary adjustments will explain the method described above.

Aside from the effect which the removal of inequalities generally produces, the classifications of such a system enable each employee to see for himself the direction in which his greatest opportunities lie. He may be efficient in his class, and thereby obtain the graded service increase at the end of the first and second years; or excelling in his work, he may merit promotion to a higher class with its larger remuneration; or being a person of exceptional capacity and skill he may look forward to employment in a special classification where the salary and opportunities are of executive grade.

Intensive Methods in Wage Adjustment

A knowledge of the principles of wage determination, as considered above, combined with a study of the forms and methods employed in the control of the stenographic department, as shown in Chapter XVIII, will disclose the essentials needed in approaching the problem of wage adjustments, whether for the purpose of removing unjust inequalities or to provide incentives to better work, under the several guises of bonus, premium, or profit-sharing plans.

In the office of average size, few operations will be found that occupy all the time of any one group of employees. Hence it will pay to standardize some operations and to let others go. Under such circumstances it may be possible to introduce bonus payments in some departments and not in others, or to pay a bonus upon certain operations that can

be standardized. In such cases the bonus is applied to the time spent on standardized work and the regular salary is paid for the balance of time spent on unstandardized jobs. The test of thoroughness in establishing bonus systems of payment does not depend upon the size of the field covered, as much as it does upon the intensiveness with which the work of departmental analysis and job analysis is carried on.

A Bonus Plan Based on Quantity and Quality

The following account of the method whereby Montgomery Ward and Company introduced a bonus system into their stenographic department is illustrative of the intensive method of measuring the employee's production, and of basing upon the result a rational system of bonus payments.* To arrive at the correct standard the following steps were taken:

1. Preparation of the organization.
2. Training of operators.
3. Establishing a basis for computing output.
4. Determining the rate of reward.
5. Adjusting the system to fit inequalities in ability.

It will be noticed that the intensive method does not base its system upon grades of work as they exist in the organization and which were established by uncontrolled conditions. The group selected for investigation was the stenographic, typing, and dictaphone department. The first thing done was the standardization of the physical arrangement of the desks, chairs, and equipment. A desk was made to suit the peculiar condition of the department; a standard chair was developed which could be adjusted to meet the physical requirements for the comfort and ease of any operator; detachable racks, copy-holders and cabinets were provided suitable to the various types of operations, such as copying

*System, June, 1918.

from manuscript, typing from dictaphone records, etc. Then came the study of the various operations, to improve the necessary motions and to discard the unnecessary ones. Finally all these standard requirements had to be written up in a book of standard instructions.

Training the Workers

Now that the physical environment dependent upon equipment, methods of working, etc. had been standardized, the next step was the standardization of the worker. Accordingly the stenographers, typists, and operators were taught to handle equipment and supplies with the least loss of energy and time. Here the book of instructions played a leading part, for after the easiest and quickest ways had been explained to the operator the book could be left as a standard guide of procedure. For example:

"When you make your pick-up of letter-head and manila paper, reach over to the cabinet but once and bring away all papers with the left hand. Take up the carbons in the right hand and bring all papers together at the left of the machine. Place the carbons as nearly in the correct position as you can with one movement of the hand for each carbon.

"Place envelopes in the pigeonhole face up and flaps turned away from the machine, turn the wrist as you carry them to the typewriter, and they will be in the proper position to insert.

"Tie your eraser to the typewriter on the side of the stronger hand. Three or four bands linked together are better than a string."*

Records of this sort insure the concern against the loss of those gains in efficiency which have cost so much to obtain

*The last rule, though perhaps a seeming trifle, becomes really quite significant when you multiply the time consumed in the search for the eraser, by the number of times a day the search is made, and by the number of girls. A low estimate is one erasure for each letter, one-sixth of a minute to find the eraser each time, 100 letters a day, or an actual loss of about 15 minutes a day for each worker for this simple cause.

but which changes in personnel and other vicissitudes of management always tend to obscure and eliminate.

Selecting a Basis of Measurement

Since the goal of the investigation was a system of payment based on fair standards of output, it was necessary to obtain as accurate a method of measuring each employee's output as possible. After testing all the known methods the unit of measurement adopted was the standard line of six inches, the margin bell set accordingly. For measuring the letter length it was desirable to devise a scale which would show the number of full length lines; this was accomplished by means of two transparent celluloid rectangles, one marked with a scale to measure full-length lines single-spaced, and the other to measure double-spaced lines. Standardized allowances were to be made for double spacing between paragraphs and for the short lines of the address—state, name, salutation, and closing, and for the initials. These details having been standardized the plans for measuring the output were complete.

Determining the Bonus Reward

With materials, conditions, and methods of operation and measurement carefully determined and standardized, the amount of the reward for services performed could be determined. By careful time studies the output was standardized at 150 lines an hour; by this is meant that a good operator, working normally under standardized conditions, should produce at this rate over a period of 8 or 9 hours without undue fatigue; and as she adds to her skill and approaches the expert class she should be able to increase this amount by 100 per cent. Having decided on the standard task the next thing was to determine the basic salary to pay for this work, i.e., "the fair day's pay." The usual

procedure was adopted—an analysis of comparative wages for similar work in other lines of business. This method was followed and the standard market rates accepted as the regular salary, adding the bonus earnings as a separate “incentive.”

Classifying the Work and Adjusting the Salary and Bonus

Every stenographic department has a great variety of capacities, ranging from that of the “expert with a medal” to the recent business college graduate. To be fair to each class and still give to each a sufficient incentive demands the highest type of administrative judgment. It is well to compare the method here adopted for grading employees with the classification methods shown in Figure 85.

The problem at this point is much simplified by the work which has preceded it. It is comparatively easy now to grade the employees into classes below that of the standard grade, i.e., those producing 150 lines per hour. New grades were set after a careful examination of the output which should be expected from beginners and the following table resulted. “X” represents the beginner’s salary, and “Y,” which is \$6 more than “X,” represents the standard salary.

Over 150 lines an hour.....	\$Y	and bonus
“ 140 “ “ “	\$(X+5)	“ “
“ 130 “ “ “	\$(X+4)	“ “
“ 120 “ “ “	\$(X+3)	“ “
“ 110 “ “ “	\$(X+2)	“ “
“ 100 “ “ “	\$(X+1)	“ “
“ 90 “ “ “	\$(X)	“ “

An examination of the table shows that beginning with the lowest grade of 90 lines per hour and a salary of \$X, the grades ascend on the basis of an increase in output of 10 lines, which is accompanied with an increase of \$1 in salary.*

*“The fact,” says Mr. Kent, who is responsible for this system, “that the salaries can be indicated by symbols shows the flexibility of the system. As the standard output was scientifically determined at 150 lines per hour, it remains constant, but the values of X and Y can be and are being increased to amounts consistent with general labor conditions.”

Making Adjustments Because of Errors

The quantity basis for determination of wages has its limitations. Accuracy and neatness in letter-writing are often the most desirable elements in stenographic or typing service; therefore a check must be put upon the speed that produces quantity at the expense of more desirable factors. These rates have been set to supplement the regular salary:

- 10 cents for every 70 lines over standard, if no errors are made in a day.
- 10 cents for every 100 lines over standard, if 1 error is made in a day.
- 10 cents for every 120 lines over standard, if 2 errors are made in a day.
- 10 cents for every 150 lines over standard, if 3-5 errors are made in a day.

No bonus is paid if more than 5 errors are made.

Each day's basis of figuring bonus would vary if errors vary from day to day; i.e., if no errors are made one day but 2 the next day, the first day's bonus is on 70-line basis, whereas the second-day bonus would be on 120-line basis.

Checking the Errors

There are different ways to check the errors. Some firms employ proof-readers, others rely upon the supervisors; still others expect the correspondents to note mistakes and report them to the head stenographer, or other supervising authority, who keeps the records of the employees' typing time and other services.

All bonuses are carefully figured on the typing time only so that losses due to taking dictation, doing clerical work, etc., do not count against the typing record.

Making Up the Bonus Records

The batches of letters go to special measuring clerks who fill out a blank so devised as to show each girl's daily output

record for a week, at the end of which time output totals are determined. This record, combined with the correspondent's "error report," makes up the employee's bonus record for the week.

BONUS REPORT									
For Week Ending March 9									
NAME	ACTIVITY	HOURS WORKED	ACTUAL RATE LINES PER HOUR	TOTAL LINES PRODUCED	TOTAL LINES EXPECTED	EXCESS PRODUCTION	BONUS EARNED	TOTAL ERRORS	BASIC RATE LINES PER HOUR
Vering	Operator	33.76	274.3	9,262	5,064	4,198	\$5.67	1	150
Kavanaugh	"	49.17	163.5	8,038	6,884	1,154	1.68	0	140
Diestlow	"	28.99	157.9	4,579	2,899	1,680	2.40	0	100
Resch	"	38.78	155.6	6,034	5,429	605	.88	2	140
Olund	"	39.74	153.2	6,088	5,564	524	.75	0	140
Mullins	"	44.51	126.4	5,626	5,786	-160	-.23	0	130
Sheehan	"	48.75	120.9	5,898	5,850	48	.07	0	120
Wintz	Typist	20.92	193.6	4,050	3,138	912	.80	6	130

Figure 86. Weekly Summary of Production and Bonuses

This record shows the weekly production of each operator, together with the time consumed.

For purposes of comparison both by the manager and the employees themselves, a summary sheet (Figure 86) is prepared showing the record of each girl in the typing and stenographic sections. This summary carries the analysis shown on the reports in Chapter XVIII, into the realm of wages.

CHAPTER XXXIX

SPECIAL PROBLEMS OF BONUS-SETTING

Factors to be Considered

It has been thought best to outline in the previous sections the general approach to the subject of setting a bonus, before discussing the special features of the problem. These features may be classified as:

1. Deciding upon the operation unit.
2. Determining the standard production for each unit of operation.
3. Establishing a graded list of errors.
4. Working out adequate incentives for increased production.
5. Setting penalties for inefficiency and errors.
6. Securing and maintaining records of time, production, and cost of operations.

These special problems, to be sure, have their setting in the general plan of wage determination, which may be summarized as follows:

1. Personnel:
 - (a) Number of workers.
 - (b) Method of payment.
 - (c) Earnings, separately and in total.
 - (d) Length of service of each employee.
 - (e) Date of last increase of salary of each.
 - (f) General impression.
2. Work:
 - (a) Analysis of character of work.

- (b) What is done by each person
 - (c) What is true cost in detail.
 - (d) Status of present production.
 - (e) Setting standards of production.
3. Purpose:
- (a) Obtain data on growth of each activity.
 - (b) Compare relative utility of the various activities.
 - (c) Provide basis for salary adjustments.
4. Future plans:
- (a) Discontinuance of operation?
 - (b) Combination with another operation to promote efficiency or reduce cost?
 - (c) Institution of a system of control.

Deciding upon the Operation Unit

A thorough-going application of job analysis is necessary to obtain a satisfactory unit of operation. Such an analysis may involve long and complicated time studies, but more often a simple, common-sense division of the job into its component parts will suffice, if accompanied with a definite consideration of the relation of the parts to the time required to perform them. The procedure necessary to the solution of this problem is illustrated by the following analysis sheet (Figure 87) pertaining to a job known to the firm using it as "Correcting Files from District Agents' Sales Reports."

The first item to observe is that the symbol 17 shows that this job has been differentiated from all others of the office and that this number will serve to identify it in all future records. The second point of interest centers in the item, "Unit: One name checked," which is the unit operation settled upon after an analysis of the job into its component parts, as shown in items from "(a) Collect sales reports," to "(f) Return pans to cabinet."

OPERATION 17 CORRECTING FILES FROM DISTRICT AGENTS' SALES REPORTS

- (a) Collect sales reports.
- (b) Secure pans from cabinet.
- (c) Prepare list of new men, dealers, corrections and renewals for Graphotype operators.
- (d) Take "Kills" out of file.
- (e) Stamp report.
- (f) Return pans to cabinet.

Unit: One name checked.

	Time (Min.)	Production (Units)	Hourly Av. (Units)
Miss H.	57.25	84	87
" "	90.58	199	131
" M.	53.02	77	87
" "	68.40	115	101
" E	195.33	311	95
" "	60.00	76	76
" "	38.00	51	80

Average 93

STANDARD FOR \$8 CLERK—60 UNITS AN HOUR

Cost per M, \$3.03	Bonus per M Excess	Bonus for 100 an Hour for 44 Hours	
		(4,400 2,640 1,760	Output— Standard= Excess)
50 per cent	\$1.52		\$2.68
60 per cent	1.82		3.20
70 per cent	2.12		3.73

STANDARD FOR \$8 CLERK—70 UNITS AN HOUR

Cost per M, \$2.60	Bonus per M Excess	Bonus for 100 an Hour for 44 Hours	
		(4,400 3,080 1,320	Output— Standard= Excess)
50 per cent	\$1.30		\$1.72
60 per cent	1.56		2.06
70 per cent	1.82		2.40

STANDARD SET—70 AN HOUR FOR AN \$8 CLERK, WITH A BONUS PAYMENT OF \$1.56 PER THOUSAND

Standards:

- \$8 clerk—70 an hour
- 9 clerk—79 an hour
- 10 clerk—87 an hour

Figure 87. Operation Analysis and Setting of Production Standards and Bonus

Covering time studies, setting standard of production, cost of production, and bonus payment per thousand.

Determining the Standard Production Output

A further study of the analysis shows the type of time studies, together with the production and hourly average, needed to arrive at a general production average of 93 units (checking one name) per hour.

With the information which the general average output of all operators gives, together with the hourly average of each operator, the manager has a basis for estimating the working capacities of his employees. The problem, aside from the technical features, consists of setting a standard which is fair to the employee as well as to the concern. To require, therefore, the \$8 grade of clerks to do 93 units per hour is manifestly impracticable, since it would require their best efforts continuously even to reach par. This would discourage effort, since it would be impossible for a large number to earn a bonus sufficiently large to induce them to increase their output—the goal of the whole bonus scheme.

On the other hand, the manager must not set the standard too low or the concern will suffer losses.* Too low a standard forces up the cost per unit beyond a profitable point in production. Accordingly, the analysis sheet shows that costs were investigated at two points to establish the minimum standard: 60 units per hour and 70 units per hour. An inspection of the figures will show at a glance why 70 units were adopted by the manager.

Suppose the standard is set at 60 or 70, and a possible production of 100 per hour over a week of 44 hours is allowed. The cost of an \$8 clerk is \$.1818 per hour. A production of 60 per hour makes the per thousand cost of this operation \$3.03. A production of 70 per hour lowers the cost to \$2.60.

*It is usually better, all things considered, to set the standard too high rather than too low, since an upward revision, should the original standard be found wrong, usually causes ill feeling among the employees, whereas there is no basis for objection on their part when the revision is downward.

Setting the Rate

After the standard has been decided upon, the question of the rate of bonus comes up for consideration. Here the problem is to give the employee a fair share of the saving resulting from the lowering of the unit cost due to increased production. The management, it must be remembered, has spent its money in standardizing conditions and training the employee. Besides there is the question of errors. The cost of handling and adjusting them is estimated and forms a charge against the bonus, either as a flat rate deducted as they occur, or as a factor in figuring the bonus rate. In the latter case the rate should be set sufficiently low to absorb the cost of handling errors. With all these factors in mind it would not be fair to give the employee all the saving resulting from increased production and accordingly, in the instance under consideration, the bonus rate was fixed at \$1.56 a thousand units.

If the standard were 70 for an \$8 clerk, the cost per thousand would be \$2.60 for all production below standard. If a bonus is offered at 50 per cent of the original cost, the bonus payment would be \$1.30 per thousand; at 60 per cent the bonus would be \$1.56 per thousand; at 70 per cent it would be \$1.82 per thousand. Suppose that an \$8 clerk showed a production of 100 for 44 hours, or 4,400, her standard for the 44 hours would be 3,080 and her excess production would be 1,320. If she were paid a bonus at 50 per cent of original cost, or \$1.30 per thousand, she would receive \$1.72; if at 60 per cent or \$1.56 per thousand, she would receive \$2.06; if at 70 per cent or \$1.82 per thousand, she would receive \$2.40.

Using the standard set for the \$8 a week clerk as a basis, the proportionate production expected for higher salary rates was figured out. Thus the \$9 a week clerk was expected to produce 79 units; the \$10 clerk 87 units an hour.

Illustrative of the same process, but showing only main results, is the abstract shown in Figure 88, covering operation number 12 performed in the addressograph section. Here the point system is used. It is a fairer method of computation in this instance because of the divergence in the time it takes to handle the items comprising the operation. Actual study brought out that it takes 4 times longer to address this particular envelope than to handle a ledger sheet. It is also noticed that in the determination of the bonus, a flat deduction is made for every error, instead of, as in the former case, making allowance for their average cost.

OPERATION 12

ADDRESSOGRAPH SECTION

Rating for promotion:

- (a) Secure ledger.
- (b) Add columns and secure average sales.
- (c) Address envelopes.
- (d) Make promotion records.
- (e) Check dummy ledger sheets.
- (f) Return ledger.

STANDARD

\$8 clerk—	36	an	hour
9	"	—40	" "
10	"	—45	" "
11	"	—49	" "
12	"	—54	" "
13	"	—59	" "

Count one point for every ledger sheet. Four points every envelope addressed.

Bonus payment for excess production \$3.02 per thousand. Error deduction \$.25 for every error.

Figure 88. Operation Analysis, Production Standards, and Bonus

Data sheets of this nature covering each operation, inserted in loose-leaf binders, form a convenient reference for the clerk in computing the bonus earnings.

Work Ticket

In the actual operation of the systems it is necessary to provide means of securing and maintaining records of time, production, and cost by operations. A work ticket, filled out by each employee, forms in this case the basis for all computation. This ticket (Figure 89) has spacing for date, time at which work on each operation was begun and was completed, amount of production within the given period expressed in number of units, and the number assigned to each standardized operation. This information is filled in by the worker himself and therefore will not be open to his objections. The form is elastic in make-up, containing as little printing as possible, but with spacing sufficient to contain all necessary data for a week where employees change from one job to another. This sheet is large enough to suit the needs of 98 per cent of the employees. A few employees, perhaps, will have to use two or more forms in the week. These tickets, made of bond paper ($6\frac{1}{2} \times 14$ inches), are folded and placed in the time card racks behind the registration card at the start of the week. Each ticket is then removed by the clerk and retained until the end of the week, when it is turned in. However, the standardization representative checks it daily, for which purpose he makes regular rounds to the various sections. The first column is for the date and the time. At the top of the remaining columns the operation number is inserted. Under this number in the same column, opposite the time when this particular operation began, is inserted the number of units produced. The beginning time of the second operation is the ending time of the first, etc.

Weekly Summary of Results

The reverse side of the form (Figure 89b) is printed like the front and entries may be brought over when neces-

Time	12	17	OPERATIONS AND PRODUCTION			
8/19	<i>1.00</i>					
8-9	<i>64</i>					
		<i>3.00</i>				
12:00		<i>983</i>				
12:30	<i>1.75</i>					
2:15	<i>110</i>					
4:30		<i>2.25</i>				
		<i>474</i>				
8/20	<i>2.15</i>					
8:00						
10:10	<i>145</i>					
		<i>1.35</i>				
11:30		<i>732</i>				
	<i>.50</i>					
12:00	<i>30</i>					
12:30		<i>4.00</i>				
4:30		<i>400</i>				
8/21		<i>8.00</i>				
8-4:30		<i>1100</i>				
8/22		<i>8.00</i>				
8-4:30		<i>1105</i>				
8/23	<i>2.00</i>					
8-10	<i>1.35</i>					
10-		<i>3.75</i>				
2:15		<i>421</i>				
4:30	<i>2.25</i>					
		<i>153</i>				
8/24	<i>4.00</i>					
8-12	<i>297</i>					
11:00		<i>3.50</i>		Over time		
4:30		<i>719</i>				

Figure 89. (a) Employee's Work Ticket (face)

This shows production and number of hours on operations 12 and 17. Italic figures above production amounts indicate number of hours.

rate of bonus per 1,000 applicable to each operation. A certain amount is deducted from bonus earnings for errors, which are taken from a separate memo (Figure 90) handed in by the inspection department.

At the bottom of the work ticket are given the total hours worked by the employee, the overtime, the total bonus for the week, as well as the amount to be deducted for errors.

As will be noticed, this ticket is self-collating. At the close of the week the number of hours worked in each case (fractions of hours stated decimally) is inserted in red by the standardization clerk in the spacing above the amount of production. The standardization department makes all the required entries on this slip, and it is not necessary to accumulate separate records entailing extra work and perhaps errors. After the bonus is figured these tickets are passed to the pay-roll clerk who has already figured the

ERROR REPORT	
Operation on Which	
Error Was Made	
Group in Which	
Error Was Made	
Date Error Was Made.....	
Description of Error.....	
.....	
.....	
Name of Clerk	
Who Made Error.....	
Corrected by.....	
Date.....	
<p>One of these reports will be made for each error, by the clerk making the correction. The error will be shown to the clerk who made it and her signature secured on this report.</p>	

Figure 90. Error Memo

Total errors of an employee on a certain operation, as shown by these memos, are entered on work ticket at end of week.

salary from the time cards (registry) and now posts the bonus, together with the deductions. The tickets next go to the statistician for recording and posting to the record card. Finally they are filed and in case reference to them is needed they afford an original source of consecutive information. There are no collation cards to cause errors through incorrect copying or balancing.

Graphic Representation

To bring out more forcibly the value and productive capacity of each employee and also to show the results obtained for each operation, a graphic presentation is made. Thus in Figure 91a the upper left-hand corner shows the operation number. This is followed by the name of the employee, the salary received, and the value of the operation at this salary, which in this case is \$2.70 per hundred. The standard for this operation is 10 units per hour. The line showing the standard is therefore drawn opposite the figure 10 appearing at the left side of the card. Variation from this standard is shown by another line giving the actual production by weeks, one square being allowed for each week. The figures at the bottom of the chart give the number of hours worked during each week on the operation.

Thus the graph not only shows the progress for each week, but it also gives an idea of what this particular employee can do so far as this particular operation is concerned. In this way the work performed by all the employees on a given operation can be assembled and the accuracy of the standards verified. By making a composite chart it will be readily seen how close actual accomplishments approximate the standard set.

On the other hand, the graph gives at a glance the fitness of the individual employee for the operation in question. One employee, for example, has a uniformly poor

Operation 412

12 - 1962

MARY JONES - \$12 a Week - Value of Operation at this Salary \$2.70 per 100 Units - Standard 10 Units per Hr

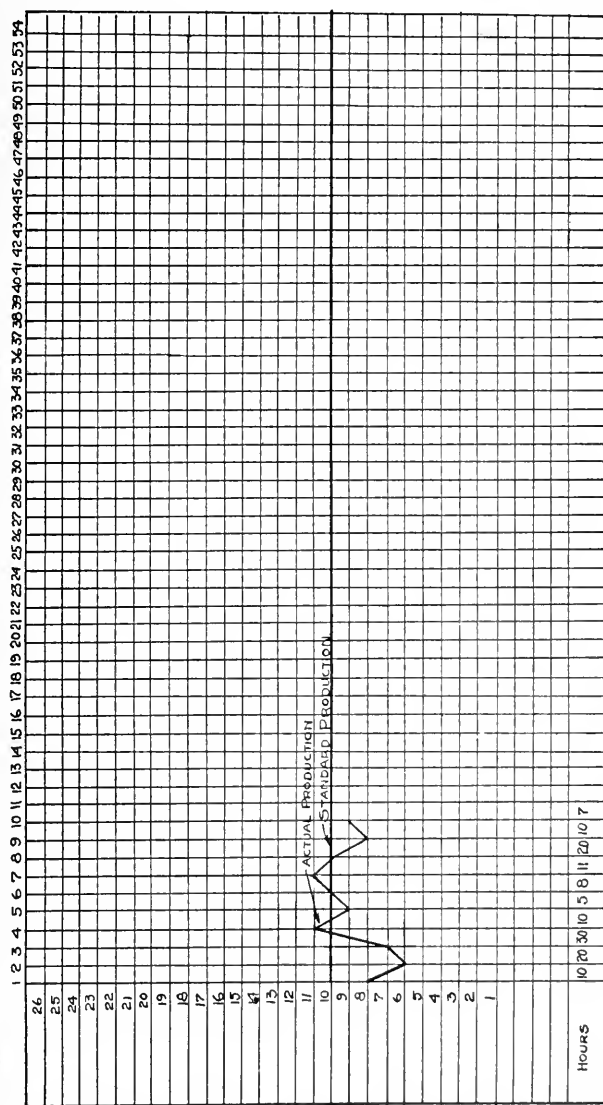


Figure 91. (a) Graphic Chart Showing Weekly Variation of Employee's Production on One Operation (face)
On this chart the relation between the standard set and the actual production can be readily seen. This chart may be used as a basis for determining the type of work for which the particular employee is best fitted.

record on one operation, while on another operation very good results are obtained. This means that the manager, if he wants the most efficient results, must assign the employee only to those operations in which he approximates or exceeds the standard. This chart eliminates guess work as to the employee's actual fitness and makes intelligent management possible.

Monthly Balance For or Against Employee

On the reverse of this chart the monthly balance for or against the employee is summarized. It shows the actual

Date	Dr.	Cr.	Date	Dr.	Cr.	Date	Dr.	Cr.
July 1	.54							
7	2.16							
14	2.42							
21		.27						
28	.14							
July	4.90							
Aug 4								
11		.30						
18								
25	.54							
Aug.	.24							
Sept. 2	.19							

Figure 91 (b). Employee's Monthly Balance Sheet (reverse)

Showing worth of each employee to the concern. It effectively brings out, in dollars and cents, any losses due to underproduction.

value of an employee in dollars and cents. An entry is made each week and a summary in red ink is made at the end of the month. Under the column headed "Debit" is indicated the amount by which the employee fails to earn

his salary. In the "Credit" column is placed the amount by which the clerk exceeds the salary requirements. This record forms a powerful lever not only in controlling the clerk but in moving the management to action as well. Managers grow indifferent to conditions just as frequently as others. It is, therefore, a common experience after a bonus system has been installed to find managers paying a great deal of attention to those who exceed bonus standards and forgetting those who are below. The record here given brings home the direct loss and indicates the indirect one which cannot be figured accurately but which may, however, be estimated.

Method of Actual Presentation

Finally, the method of actual presentation to the employee deserves consideration. It is important that the various items

Count your money before leaving the window Claims for adjustment must be made immediately to be recognized (Receipt pasted here)	Wage	13	00
	Overtime	1	55
	Bonus	3	70
	Total	18	25
	Deduct Lateness		
	Benefit		
	Country Club		
	Bond		
	Lost By Errors	1	00
	NET PAY	17	25

Figure 92. Employee's Pay Envelope
 Information as to bonus and deduction for errors is given.

be correctly itemized. If the listing on the pay envelope was merely:

Wages	\$15.00
Bonus	<u>5.92</u>
Total	\$20.92

the reaction of the employee's mind would be entirely different from that when the items are listed as shown on Figure 92. Here the deductions for tardiness and loss of bonus through errors are effectively brought out. A study of these items and their arrangement emphasizes the importance of considering the personal element in every relationship with the employee. The psychology of the Saturday's pay envelope balances the psychology of Monday mornings.

CHAPTER XL

METHODS OF STIMULATING EMPLOYEES

The Necessity for Rewarding Effort

How to keep the whole body of employees working up to their full power is one of the most important problems in any business. Every employee is subject to the temptation to slow down now and then. No matter how carefully he is selected or fitted to his job, no matter how fair and agreeable the conditions and surroundings of his labor or what the compensation, the ordinary man is apt to loaf now and then—not to pull his best. This is human nature. It is certain to happen. The natural pace into which all of us tend to settle is the jog trot. Successful business requires that a much higher pace be set and maintained. When each individual works alone such unevenness of production may not matter; the intense work of creative moods may make up for the dull times. But in a highly organized, modern business, where all workers are interdependent, when one employee slows up all are affected.

In seeking a corrective to the fault, it should be remembered that the tendency to “soldier” is inherent in human nature, which is instinctively lazy. Any real corrective must be something which is active and adaptable. No single expedient and no rule-of-thumb plan will suffice to keep the worker interested and eager. Merely raising the wages will be of only temporary help.

It is useful to bear in mind that the executive also is subject to the tendency to relax effort. The executive, however, is kept from “sleep” by two sorts of stimuli. He is continually spurred to further effort by the emergencies of management—little things go wrong and call for extra effort to

fix them—and, on the other hand, special opportunities for improvement and profit continually present themselves and stir fresh interest. What is needed for employees is some device or system which will—as in the case of the executive—wake them up when they slack and stimulate them with an extra reward for extra effort. The plan should be flexible and adjustable—something like what Chauncey Depew once described as “a star in the van, and a spear in the rear.” The essential point is that the reward must be the result always of extra good work.

Conditions of Reward

Whatever plan is devised, it should comply with the following conditions:

1. It must apply to the whole body of workers. Devices like efficiency contests will not of themselves suffice.
2. It must be manifestly fair. There must be no suspicion of favoritism. Some adequate method of recording the amount and character of the employee's work must be found.
3. The rewards must be satisfactory to the employees concerned. They should have some part in checking or inspecting the system of marking or awarding.

Form of Reward

The rewards may come in the form of time off or other privileges, or they may be in the form of presents of articles selected by a committee of employees. Such methods are sometimes useful, especially with young employees who have to give their pay to their parents and who are accordingly affected more strongly by something which they can enjoy as their own—a gift or a half-holiday.

The rewards may be in the form of honor and prestige, the principle of “service stripes.” This is a good plan so far as it goes. It develops the feeling of responsibility and *esprit de*

corps in an employee. He cannot afford to "soldier" without losing his prestige among his fellows and there results an automatic reminder and stimulus somewhat like that which the responsibility of management furnishes the executive.

Or the reward may come in the form of an addition to his pay. This plan is best of all, combining the merits of the others. The money basis of the reward, which actually exists with all methods of acknowledgment, is given to the employee in a form which he can use—not in some "special currency" as with the preceding plans.

Reward Based on Quantity or Quality of Work

The need for stimulus is felt both in large and in small concerns. The methods which are available in the two cases vary somewhat. The effort to stimulate may be directed at either: (1) quantity of production, or (2) quality of work—faithfulness, accuracy, spirit, etc.

Quantity of production depends upon the standardization of work and duties and in consequence can only be practically applied in a large office where a sufficient body of statistics can be gathered as a basis for standardization. In the office where only a few people are employed and where work is varied—where the stenographer not only takes dictation and transcribes it, but also mails all the letters and files the carbons—it would be impracticable to attempt standardization on any considerable scale. A reward for quantity usually takes the form of a bonus plan.

Systematic efforts for improving the quality of work and the industry of the worker are useful in either the large or the small concern. They mean the development of habits of accuracy and conscientious work. Efforts of this kind are comparatively recent. Concerns have shrunk from undertaking them, fearing they would complicate the routine or cause possible friction with employees. In late years they

have grown more numerous under the spur of intensified competition and perhaps as an indirect result of success in increasing quantity of production through bonus plans.

The Merit and Demerit Plan

The most thorough-going and promising method thus far developed is that known as the merit and demerit plan. When based on sound principles and administered with discretion, it stimulates effort. The plan involves four considerations:

1. The essential idea is to keep a close and accurate record of the quality of the employees work, and to reward those who do well in proportion to their merit. "Credits," "points," "merits," are given for such qualities as regularity of attendance and punctuality, accuracy and neatness of work, care of material, interest in work shown by suggestions, and the like. "Demerits" are given for the opposite qualities.

2. A certain quota of credits may be earned each month. In several cases the quota is *one* for each work day, which amounts to 25 to 27 credits per month. The employees who reach or exceed this quota receive either some mark of distinction or some immediate money reward, such as a cash prize. Demerits do not mean a reduction in the regular wage, but a large number of demerits, indicating lack of capacity or industry, usually leads to dismissal.

3. To insure fairness in the reward, it is essential that the work which the employee does shall be explicitly appraised and described. The points for which credits or demerits are given must be defined precisely and the employees must be made familiar with the rules.

4. The record of the employees' work must be kept with close accuracy. It is well if this can be checked in some way by representatives of the employees themselves. It is well also to let the employees know frequently of their "score"—perhaps by means of a weekly bulletin or card.

The Merit Plan in a Selling Organization

One selling organization of moderate size has used the following plan with conspicuous success. A merit is earned by an employee if he is prompt in his attendance in the morning and at noon, does not make careless errors during the day, and leaves his desk in good condition at night. Merits may be given to an employee for high quantity and quality of work and to an employee who shows that he thinks about his work, as when, for instance, he discovers an error made by someone else and rectifies it.

The reasons for awarding demerits are definitely specified. Tardiness is regarded as of first importance. Half a demerit is given for being late up to two minutes; one demerit for from two to ten minutes; and one and one-half demerits for more than ten minutes. Two demerits are given for one-half day's absence, three for a whole day's absence, and one for any time allowed off at the employee's request. This apportionment of merits and demerits assumes that no deduction is made from salary for periods of lateness or for short periods of absence.

For an error which is due to carelessness on the employee's part, a demerit is given. If the work assigned for the day is not completed before he goes home, a demerit is given. For instance, in the typing department the quality and the quantity of work done must be taken into consideration. For this purpose, the work done by each operator should be carefully checked according to an established standard. A demerit is given for failure to leave desks, files, machines, etc., in proper condition at night. Demerits are also given for minor breaches of the rules of courtesy or discipline when they are not serious enough for dismissal. When a merit or demerit is awarded an employee, a memorandum notice is sent to him by someone who is in authority, usually the chief clerk.

Standards and Rewards

The efficiency standard for the average employee is set at 80 per cent. If he earns 20 or more of the possible 25 to 27 merits in any month—that is, if he has a surplus of 20 merits over demerits, he is given a prize of \$3. If he earns 25 merits or more in any one month, he receives an additional prize in the form of a gift of \$2 or so in value, selected by a committee of employees.

Method of Recording Merits and Demerits

The head of each department makes a detailed report each night to the office manager regarding the record of his subor-

EFFICIENCY RECORD	
Name_____	Dept_____
From_____	To_____
Merits_____	Demerits_____
Balance_____	
Statement for the Month to Date:	
Merits_____	Demerits_____
Balance_____	
Remarks:	
_____Office Manager	
<p>If you do not understand the above record, or if you have any doubt as to its correctness or fairness, be sure to ask the Chief Clerk for an explanation of your merits and demerits.</p>	

Figure 93. Detailed Efficiency Record of Employee

This form is sent to employees at regular intervals to keep them posted as to their efficiency standards.

dinates during the day. From these reports, weekly records are compiled, and a card notice (Figure 93) is given to each employee, showing the number of merits and demerits for the current month to date. In the space provided for remarks, the office manager occasionally adds a word of praise or advice.

The monthly result of the merit record is filed with the employee's individual record. An envelope (Figure 94), upon the outside of which the details of his record are entered, holds the employee's application form and other information about him. Copies of suggestions that the employee

MALE FEMALE		EMPLOYEE'S RECORD ENVELOPE			
Name _____		Born _____			
Address _____		Phone No. _____			
Living with Parents? _____ If not, why not? _____ With whom? _____					
Married _____ Number of Children _____					
Education _____					
Previous Experience: (Enter in chronological order beginning with position last held.)					
EMPLOYERS	ADDRESSES	BUSINESS	POSITION HELD	TERM OF EMPLOYMENT	SALARY
Remarks _____					

Figure 94. (a) Employee's Record Envelope (face)

(On this side of the envelope details as to family, education, and so on, are entered.

has made and such other papers as affect his standing are also stored in this envelope. The completeness of the information about a clerk's record enables the office manager to utilize it in making promotions in the office and also in giving advances in salary.

By means of efficient service the employee also accumulates merits that practically insure him against dismissal in case of some particular offense or error that otherwise would deprive him of employment.

EMPLOYEE'S RECORD							
	MONTH	MERITS	DEMERITS	BALANCE	DAYS ABSENT	LATE	
						No. TIMES	AMT.
Started_____							
Salary_____	Jan.						
Dept._____	Feb.						
	March						
	April						
	May						
	June						
	July						
Position_____	Aug.						
	Sept.						
	Oct.						
	Nov.						
	Dec.						
Discharged } _____	Jan.						
Left—Reason { _____	Feb.						
	Mar.						
	April						
	May						
	June						
	July						
Remarks_____	Aug.						
	Sept.						
	Oct.						
	Nov.						
	Dec.						

Figure 94. (b) Employee's Record Envelope (reverse)

On this side the employee's record for each month of the year is summarized. By bringing in additional columns records of further years may be kept.

Example of Application of Merit System

The plan now in use by the Chicago Motor Bus Company is of interest because of the combination of principles which it shows. Harold B. Weaver, Manager of the company, has described the plan in 100% for July-August, 1918, as applied to the company's drivers, but it is used with all employees. A description of the system is given here in full because in many ways it is readily adaptable to office conditions.

1. A man is hired at 30 cents per hour with the intention of increasing the rate gradually according to length of service. Instead of giving the increase at regular intervals, a quota of 150 "credits" is set, and the increase given whenever the employee has gained that amount. Ordinarily the man receives one credit for each day in which he has a clean score, which would bring the increase of 1 cent an hour in his rate at the end of six months.

2. The promotion may be accelerated. After any two successive months of a clean score, a man gets 30 "credits" instead of 25 per month; after six months of a clean score, 35 per month; after 12 months, 40 per month. Thereafter such a man can get an increase in salary every $3\frac{1}{2}$ months.

3. "Bonus credits" are given for special service; for instance, a man may risk his life or he may sacrifice his interests to the advantage of the company. In that case, on the suggestion of the superintendent, he can be given some bonus credits. But the superintendent may only suggest it, and they must be approved by a committee of three workmen of his own grade. These bonus credits are worth just as much as cash for the man who stays with the company, as each one of them represents $1/150$ of a cent an hour. Thus the man who produces more on piece-work gets a more rapid and more frequent increase in pay. A steady wage is guaranteed him, and is much better than a fluctuating wage. When he makes \$40 in a week, instead of \$30 as he had thought, he is not

tempted to go on a picnic with his family and disorganize the service of the business.

4. When a man has gained 1,500 credits he becomes a participant in the earnings of the company. That would take him five years on the basis of 25 credits per month. By means of extra credits and bonus credits he may reach the 1,500 credit mark much sooner. One man reached that point after 16 months, three in 17 months, and six in 18 months. The plan is said to have improved the service very largely, developing carefulness, economy, and co-operative effort.

The Merit Plan in a Filing Department

Still another system for increasing efficiency, in this case among the clerks of a centralized filing department, is described by L. A. Miller of the Willys-Overland Company. The plan is called in the description a "bonus system" but it is really the "merit and demerit" plan, inasmuch as there is no effort to increase the quantity of work, merely to improve the quality. The plan takes into account accuracy, speed, and neatness of work, together with regularity in attendance. It is possible for each file clerk to attain every month 100 "points" divided as follows:

Appearance of files.....	10
Attendance	10
Punctuality	10
Accuracy of filing.....	50
Promptness of filing.....	10
Promptness in filling requisitions.....	10

This considers every part of the file clerk's duties *except production*—that is, the number of letters filed or looked up; production is in this case too variable an element to be graded. Each girl who attains an average above 90 points is rewarded with \$1 for each point above; that is, a girl who makes an average of 95 is given a reward of \$5.

A certain portion of the file is assigned to each girl and she performs all the work in connection with her file; she prepares all folders, files the correspondence, looks up requisitions, prepares cross-reference sheets—in fact, every detail in connection with her file is assigned as her responsibility. In connection with “appearance” and “accuracy,” precise and detailed instructions are furnished as to form and arrangement of folders, guides, out-cards, etc. Errors are caught in two ways: first, by the failure of the clerk responsible for that part of the file to fill requisitions promptly; second, by inspection. During each month approximately one-fourth of every file is inspected and audited and errors found are taken into consideration in computing the number of points.

In connection with promptness of filing and of filling requisitions, a time-stamp impression is made on the back of every letter and requisition, and during lunch time and after closing time the condition of each girl's file is examined. If correspondence and requisitions are not given attention within a twenty-four hours' period, deductions are made from the number of points attainable.

	APPEARANCE	ATTENDANCE	PUNCTUALITY	ACCURACY	FILING	REQUISITIONS	TOTAL	REWARD
Clerk No. 1.....	9	9	10	50	10	10	98	\$8.00
“ “ 2.....	10	10	10	48	10	8	96	6.00
“ “ 3.....	9	10	10	48	10	9	96	6.00
“ “ 4.....	9	9	10	47	10	9	94	4.00
“ “ 5.....	9	10	10	45	10	10	94	4.00
“ “ 6.....	9	8	8	47	10	10	92	2.00
“ “ 7.....	9	8	6	49	10	10	91	1.00
“ “ 8.....	9	8	10	47	7	10	91	1.00
“ “ 9.....	8	10	8	46	10	10	91	1.00
“ “ 10.....	8	8	8	45	10	8	87	....
“ “ 11.....	8	10	4	48	10	7	79	....
Total.....	96	99	94	720	107	101	1,009	\$33.00
Average.....	8.7	9	8.5	47.2	9.7	9.1	91.7	\$9.00

Efficiency Bulletin

To promote rivalry a bulletin is posted on the first of each month. When the merit system was introduced the general average of efficiency was 65 per cent. A few months later it increased to 91.7 per cent as shown in bulletin on page 619.

It will be noted that all but two of the clerks received a bonus, and that the amount of the reward earned depends in no way upon salary received. All file clerks, it may be

Age _____ years _____ months.			
Height _____		Weight _____ lbs.	
Name _____ (Give full name—surname first)			
_____		Branch _____ 191 _____	
Married or Single	Length of Service		Assumed Present Duties
	Years	Months	
		Previous Experience, if any	
Last Increase of Salary and Last Bonus			Present Salary and Allowance
Date _____ 191 _____	Increase, \$ _____	\$ _____ SALARY	
Date _____ 191 _____	Bonus, \$ _____	\$ _____ ALLOWANCE	
RATINGS			
		Mgr. Inspr.	Mgr. Inspr.
Appearance.....	_____	_____	Personal Standing and
Presence and Address..	_____	_____	Associates.....
Manner.....	_____	_____	AS TO CLERICAL ABILITY:
Speech, Grammar, etc..	_____	_____	Neatness.....
Intelligence.....	_____	_____	Quickness.....
Application.....	_____	_____	Accuracy.....
(FOR OFFICERS OVER 21 YEARS OF AGE)			(ALL OFFICERS)
		Mgr. Inspr.	GENERAL STANDING
Initiative.....	_____	_____	Mgr. Inspr.
Judgment, knowledge of affairs, etc.	_____	_____	_____

Figure 95. (a) Special Inspector's Report of Employee's Efficiency

A special report as to an individual employee's efficiency, which is made out at regular intervals by an official of the company.

State present duties in detail:—		
What other duties have been assigned to him during the year, and how have they been performed?		
Has he been uniformly punctual and regular in his attendance? If not, how often has he been irregular in his attendance, and from what causes?		
What kind of associates has he, and how does he employ or conduct himself out of business hours?		
What knowledge has he of the French language?		
GENERAL REMARKS (Special qualities, deficiencies, etc.)		
_____ Manager		
FOR INSPECTOR ONLY		
	Remarks respecting special points in his favor	Remarks on deficiencies
A Degree of ambition, interest shown in his work, etc.	{ _____ _____ _____	C _____ _____ _____
B If an officer is noticeably bright, in manner, or unduly quiet, note here.	{ _____ _____ _____	_____ _____ _____
GENERAL REMARKS:		
D As to promise, work fitted for, aptitude in the handling of correspondence, etc.	{ _____ _____ _____	_____ _____ _____

Figure 95. (b) Special Inspector's Report of Employee's Efficiency
(Continued)

added, receive a classified rate of pay and this rate is increased at the end of the first and second years of service.

Periodic Rating in a Bank

Another widely used method of stimulating efficiency is that of a periodical rating of employees. This method is used, for example, by a large bank which has many branches, varying greatly in the number of employees. A record of errors

is kept in every department or branch. When the auditors and inspectors come around, such matters as carelessness and lack of neatness are carefully noted against the men responsible for them. Once a year, the manager of each branch makes a full report on all members of the staff; this report is kept on file in the home office. When the inspectors visit the branch they make a special report (Figure 95), checking the markings on the first report. The information gained from these reports, together with other evidence, enables the executives in the head office to gage each person's standing, as a basis for a salary increase, and for a possible bonus. On the backs of these forms the following explanation appears:

A1. Highest rating

1. First class
2. Above the average
3. Average
4. Below the average
5. Low—unsatisfactory

Efficiency System as Applied to a Public Service Company

A public service corporation of the Middle West, employing approximately 5,000 people, uses the following system of periodic rating.

1. An efficiency mark for each employee expressed in percentage form.
2. An attendance record which indicates the number of days of absence.
3. A punctuality record which indicates the number of times tardy.

The efficiency mark is thus described in the company's bulletin given to all employees: "The phrase 'efficiency of an employee' in a given position shall mean the ratio of the value of the employee's service to the value of the services of an

Surname_____		Given Name_____	
Birth_____		Nationality_____	
Entered Service_____		Left Service_____	
Member Building and Loan Assn._____		Dept._____	

Experience:	Education:	Yrs.	REMARKS
Years with_____	College_____	_____	
" " _____	High School_____	_____	
" " _____	Grammar_____	_____	
	Other_____	_____	

QUARTERLY PERIOD	EFFICIENCY MARK		ATTENDANCE AND PUNCTUALITY			
	FOR PERIOD	FOR YEAR	DAYS ABSENT		TIMES TARDY	
			UNEXCUSED	EXCUSED	UNEXCUSED	EXCUSED
JAN.-MAR.....						
APR.-JUNE.....						
JULY-SEPT.....						
OCT.-DEC.....						
JAN.-MAR.....						
APR.-JUNE.....						
JULY-SEPT.....						
OCT.-DEC.....						
JAN.-MAR.....						
APR.-JUNE.....						
JULY-SEPT.....						
OCT.-DEC.....						
JAN.-MAR.....						
APR.-JUNE.....						
JULY-SEPT.....						
OCT.-DEC.....						

CLASSIFICATION TITLE	HRS.	RATE	DEPARTMENT OR DIVISION	ADVICE NO.	DATE EFFECTIVE	PERIOD

Figure 96. Quarterly Efficiency Record of Employee

A running record of each employee on which details are entered quarterly so that employees can be rated as to general efficiency.

ideal employee in the position; it shall be interpreted to include all the qualities and features of an employee's service which warrant advancement and which contribute to the establishment of his value to the company."

By the general marking schedule mentioned above, the efficiency of the average employee is set at 80 per cent; 85 means "Very Good"; 90 "Excellent"; 75 "Fair"; 70 "Poor." If the mark falls below 70 per cent the employee should be dismissed. A special marking schedule is prepared by department heads in co-operation with the employment bureau for each classification that embodies a considerable number of positions. These special schedules are designed to determine the efficiency of employees on an absolute, rather than a relative, basis.

The quarterly efficiency report for each employee (Figure 96) contains a record of his absences, excused and unexcused, with specification of legitimate cause for excuse; and of tardiness, excused and unexcused. The efficiency marks are not made by heads of departments, but by employees in each department designated by the department heads.

Maximum and Minimum Plan

Another method of stimulating efficiency is to classify the office force into groups and provide a scale of maximum and minimum pay for each group. Thus in one large company there are five groups, as follows:

1. Office boys
2. Junior clerks—men and women
 - Stock
 - Mail clerks
 - Sorters
 - File clerks
 - Order writers

- Copyists
- Typists
- Entry clerks
- 3. Senior clerks—men and women
 - Checkers
 - Bookkeepers
 - Phonograph operators
 - Correspondents, etc.
- 4. Special clerks—men and women
 - Private secretaries
 - Statisticians
 - Cashiers, etc.
- 5. Supervisory and technical clerks—men and women
 - Cost clerks
 - Accountants
 - Draftsmen, etc.

Above these classes are department and bureau heads, junior officers, and executives.

A new employee or one who has been promoted enters a certain class at the minimum rate of pay for that class. If his work is satisfactory, his pay is gradually increased to the maximum until he is fit to be moved up to a higher class—to progress similarly through that from minimum to maximum, and so on. This method, while suited to the special conditions of certain insurance companies and other large organizations where it is used, is open to the objection that it is much less flexible than the merit and demerit method, making no provision for the special reward for special work of the individual.

Miscellaneous Methods

Various other methods not so elaborate or systematic as this are in more or less common use. What may be called

"service stripes" method seeks to develop in the employee the feeling of pride in belonging to the organization. The Equitable Life Assurance Society has established the "Equitable Veteran Legion," including all employees who have been five years or more in the company's service. There are nine grades representing five-year periods. Each member wears a gold-and-enamel button or pin bearing the letters E. V. L. and indicating by a pendant number the grade to which he belongs, "1," "2," etc. In the Trow Press a modification of this system is used for the office boys. There are three grades, each of which has a different colored button to be worn in the coat lapel. The boys wearing red buttons do the heaviest and simplest work, those wearing yellow buttons more difficult work, and those with blue buttons are given the more important tasks.

The "service stripes" method, like the others described, emphasizes continued good service. Various devices for getting a spurt at special emergencies have also their place. Individual output contests are used in certain departments, and an occasional half-holiday or time off may aid in carrying through a particular piece of work.

CHAPTER XLI

VACATIONS AND THE VACATION SCHEDULE

Necessity for Vacations

The importance of the vacation as a means of maintaining the efficiency of the worker is now generally acknowledged. What was at one time looked upon as a necessary evil, tolerated because sanctioned by custom and precedent, is today recognized as an effective means of conserving and building up one of the main assets of a business—the health of its working force. Business men are coming to realize that vacations taken at their expense should be spent in such a way as to bring about the maximum benefit to their interests, through the renewed health and energy of the employee. Therefore, some concerns make it a practice to send a printed card to their office employees, with the vacation list, asking them to spend their vacation period in such a manner as to bring them back recuperated in health and with renewed energy for their work.

Insuring Profitable Vacations

Many firms now make it a point to inquire into and offer suggestions as to how their office force spends its vacations. And in order to bring an enjoyable and profitable vacation within the reach of all employees, other concerns now maintain seashore and mountain camps, club houses and vacation homes, where the mode of living is supervised and proper food and enjoyable and healthful exercise are assured. In this way the employee who could not otherwise have the needed rest and change of environment is enabled to enjoy a vacation at shore or mountain at a minimum cost. The employer regards

the money spent as an investment rather than as a charity and the arrangement as one of the phases of welfare work. Many employees, especially women and girls, are influenced in their choice of a position by a liberal vacation policy. Experience shows that the firm which allows a reasonable vacation period and provides means whereby it may be spent with the greatest benefit has a big advantage over the firm which pays no attention to the matter so long as the absence of the employee does not interfere with the daily routine of the office.

The Length of the Vacation

There are still some firms whose vacation policy is largely determined by expediency and the needs of the moment. If the labor situation is favorable to the employer, vacations may not be allowed except at the expense of the employee. Most employers, however, realize the fallacy of such a parsimonious policy and the necessity of adopting a more generous attitude towards those employees who merit a period for recreation by the length of their service.

The various features of length of service, position held, nature of work, and salary received, may all be taken into consideration when determining the length of the vacation period. Experience proves, however, that length of service is by far the most equitable and successful basis for various reasons. For one reason it does not accentuate class or salary distinctions within the organization; for another, it is a method easily understood and causes no friction in regard to the time to which an employee is entitled; and finally it assumes that the employee who has worked steadily and faithfully with the same firm for a certain length of time is entitled to a vacation, graded in duration according to the length of service. The variation in the length in proportion to years of service is a recognition of the increased value of continued service. The practical effect is generally a reduced labor turn-

over which more than compensates for the additional time given.

Vacation Length Based on Length of Employment

The extension of the vacation period in proportion to the years of service is illustrated by the methods of a large insurance company which has made provision for service ranging from a few months to twenty years and over.

Another company carries out the same idea but the policy is not as liberal. Thus it allows for service of one year, one week without pay; two years, one week with pay; service of ten years for women and five years for men entitles them to two weeks with pay. The vacation weeks begin and terminate at the opening of business on Monday. If any employee selects a week which includes a holiday, the vacation begins on the preceding Friday night, salary being allowed for Saturday.

There is no generally accepted standard in respect to the length of time an employee must be connected with a concern before being entitled to a vacation. One company allows one day for each month previous to July 1; another allows one week if employed before March 1 and two weeks if employed one year; another concern gives two weeks' vacation to employees entering its service prior to November 1, and one week to those engaged between November 1 and February 1, while no vacation for the present year is given to employees engaged after February 1. As an incentive to promptness and regularity, one office manager allows an extra week, with full pay, to every employee who goes through the year without missing a day's work, and who arrives promptly at opening time each morning. This last method proved a better plan than to deduct days from the regular vacation period for time lost and tardiness. A system of punishment creates discontent, while a reward is an incentive to effort.

Vacation and Overtime Work

In arranging the vacation schedule, steps should be taken to prevent the evil so often found in poorly organized offices—that of overtime necessitated by the extra pressure of work during the week previous to and the week following the vacation period. The necessity of working overtime is less likely to arise in the case of the routine worker, but in the case of executives and other responsible employees who have many details to supervise, it is well to arrange to turn over to an understudy at least a day or two ahead, all unfinished work. This does away with the rush “to get things cleaned up” which often brings with it such a nervous strain that it largely nullifies the good effect of the period of recuperation. The same unhealthy condition exists if an employee returns from a vacation, ready and keen for his duties, only to find an accumulation of work which necessitates another rush “to get caught up.” The benefit derived from the vacation lasts just about through the “catching up” period, but leaves no stored-up energy for the year’s work ahead.

The Vacation Schedule

In every office a schedule should be drawn up for the purpose of arranging the vacations in such a way as to minimize the inconvenience caused by the absence of a number of employees. This is a particularly important matter if there is no “let up” in business activities during the summer months. Considerable care is then required so to arrange the absences, that the duties of the employees who are on their vacations can be shouldered by those remaining in the office. A general exodus during the most popular vacation months of the year, July and August, might result in the serious disorganization of business. The main object is to keep the work flowing smoothly through the various departments and the schedule should be arranged accordingly. If the business is of such a

nature that the summer is a slack period, careful planning is not of such importance, as it is then an easy matter to distribute the work of the department among the remaining employees.

Drawing up the Vacation Schedule

In making up the schedule the usual procedure is to place on a bulletin board or to send to each department or individual, a notice setting forth the conditions governing the allotment of vacations. Some firms send to each employee a printed or multigraphed form with space for name, date when employed, first and second choice as to time, and so on. Instead of a regular form, other firms make out a list of employees in each department, and this is handed round to them in the order of their length of service. Each member of a department signifies his choice of dates and if too many employees doing the same work wish to be away at the same time, the matter must be adjusted by the department head.

In a large office or department it is generally desirable to plan a schedule covering the rearrangement of duties and giving the name of the person who is to do the work of the absentee. This will insure that no function is overlooked. Also the telephone operator should be given a copy of the schedule with information as to the employee who replaces or attends to the work of the absentee during the latter's vacation. In a large organization it is well to have a complete schedule of all the departments posted on the bulletin board or sent to each department, to avoid any misspent effort in the transaction of business between the various departments. The schedule should be checked up each week to see that the plans are being followed out and the pay-roll clerk should be informed of any changes in the original schedule.

After the schedules are arranged to the satisfaction of all concerned, they are passed upon by the office manager. This

acts as a check on the departmental programs, insuring that the vacation policy is uniformly applied and that departmental arrangements are satisfactory when viewed from the point of the organization as a whole.

Form of Vacation Schedule

Figure 97 illustrates the general form of the vacation schedule. All that is required to operate it is to list the department employees in their order of seniority, so far as length of service is concerned, and to indicate clearly in the spaces provided for the purpose the dates when the vacation of each employee begins and ends. Legal holidays are shown on the form by a small dash, so that an extra day can be readily added to those vacation periods which happen to include a legal holiday.

The rules covering the granting of vacations are usually printed below the form, and in the example given are as follows:

1. The vacation season extends from February 1 to December 31, but no one will be obliged to go on vacation prior to April 1 or later than October 31, unless the conditions in the department should be such as to render this necessary.
2. Continuous service of one year or more entitles to two weeks' vacation.
3. Service of less than one year entitles to one day for each month served up to July 1, provided the date of appointment is prior to the first Monday in June of the current year, and the service is of at least three months' duration at the time the vacation is taken.
4. Allowances will be made for legal holidays falling within vacations, but such additional days must be taken before the end of the vacation season. (Holidays are indicated above by little dashes in the appropriate spaces.)
5. In choosing time for vacation, preference will be given first to the employee's position and afterwards to the length of service.

THE VACATION SCHEDULE

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[illegible]

Figure 97. Form of Vacation Schedule

This form may be extended to run over any number of months. Legal holidays are shown by small dashes and an extra day is added to the vacation periods including these days.

The Engagement of Substitute Workers

In the offices of banks, trust companies, insurance companies, and the like where the clerical force numbers many hundreds and the volume of work remains at pretty much the same level the year round, it is often necessary to engage a number of extra workers for the purpose of temporarily taking the place of those on vacation. The bases on which these substitutes are employed vary. Some firms pay a high salary for a definite period with the object of attracting those whose experience enables them to fall in line at once. Other firms engage a number of new employees in the spring, train them during the summer months, and allow them to act as substitutes for the minor positions, temporarily promoting the regular employees. This is an excellent method of training new employees. Their training is often under the guidance of the person who is to be temporarily promoted during the absence of his superior and whose work the substitute in his turn is to handle. Employees as a rule willingly and conscientiously instruct others in their duties when they themselves are to be promoted.

Testing Employees' Work During Absence

A number of firms utilize the vacation period to check up the work of the absent employee. This is especially true in the case of banks and other financial institutions. Among industrial and merchandising firms the work of the bookkeeper, cashier, and treasurer is generally verified while those employees are away from the office. But even where there is no general plan and no point is made of the matter, the practical effect of performing another man's work is that of verification.

The absence of one employee also furnishes the opportunity of testing the ability of the man who replaces him and of finding out whether he has the capacity to handle the duties

in an efficient fashion before permanently promoting him. To the alert office manager the records of performance during the vacation period constitute a valuable index as to which men are capable of taking on more responsibility.

Special Methods

What has been termed the "efficiency vacation" is coming into favor among large manufacturing concerns. The feature of this system is that the whole plant is closed down for a definite period, the equipment is overhauled, and all the employees take their vacations at the same time. This method eliminates the great amount of planning, expense, and confusion involved in the usual procedure, and the close supervision necessary in carrying out the vacation program is done away with.

In a number of concerns a bonus in time is given to employees who take their vacation before May 1 or after October 1. The object is to distribute the vacations over the whole year by offering an inducement in the form of some extra days' vacation to those employees who select the less popular months. The practice is prevalent in industries where the summer months do not show any let-up in the business or where the summer is the busiest season.

When the summer months are unusually slack some firms hold their organization intact by giving additional leave of absence without pay to those who desire to take it. This concession for the most part is taken advantage of by those who are better paid or who have no family burdens. The understanding is that the positions will be held open for the employee but that he can take from two to six weeks besides his regular vacation.

Often the nature of the work of executives demands their personal attention and it seems hardly possible to turn their numerous responsibilities over to a substitute. The return

of the executive may make the prospect of an extended absence less appealing. Whatever the reason, the difficulty has been overcome by some firms by allowing certain of their employees in this class to take their vacations in the way of week-ends, leaving on Friday afternoon and taking the whole day Saturday. This plan does away with any disorganization and is often more pleasing to the employee than would be a week or even two weeks at one time, with a prospect of all sorts of tangles to straighten out on his return.

CHAPTER XLII

OFFICE MANUALS

Purpose

Many modern offices prepare for their staff an "office manual" or the "manual of procedure." The purpose is to help outline the administrative tasks, to prevent errors, and to have a permanent record of the best methods of performing the office work. These manuals are of two general types: (1) the policy book, designed to acquaint the new employees in a general way with office rules, regulations, and customs; (2) the manual of procedure which gives definite instructions as to how best to perform the office operations found in each department.

Policy Book

Because every office has its own particular rules, some methods must be found to inform the new employee regarding them. In a small office this may be done orally at the time of hiring, or during the first few days of employment. No firm can afford to let the new employee go on in ignorance of its customs, if it wants to maintain discipline. In large offices, naturally, these customs and regulations are more numerous and more complex and there are generally more new employees coming and going during the course of a year than in a small office. Even if it were possible to have all the regulations at the finger's end, it would be a rather wasteful process to repeat these to a large number of new employees often enough so that they would be remembered. To obviate all this waste of time the policy book has come into being. It contains in black and white all these regulations, expressed in

terms clearer and more concise than any one individual can command on the spur of the moment. It eliminates the excuse of ignorance of house rules, because every member of the organization has them at immediate command.

Contents of Policy Book

The policy book, as may be inferred, covers those rules and regulations which are applicable to the office employees as a whole. While its precise contents are obviously a matter for individual determination, the following features are presented as suggestions of the field which such a book might with advantage cover. Each might constitute a separate section of the work.

1. **Inspirational Section.** Here may be presented an account of the history of the concern, as well as pictures and short biographies of its founders and present officers. This section should be written with the idea of instilling into the mind of the new employee a feeling of pride and loyalty toward the business.

2. **Personnel and Functions.** In this section should appear a list of the personnel of the business, from the president down to the office boys, with the title of the position held in each case. It is also a good plan to include an alphabetical list of employees, showing the department to which each individual belongs. This is followed by a brief synopsis of the function of each department.

3. **Office Information and Instructions.** Under this heading should be included information as to the policy of the organization toward the individual employee. Such items as hours, overtime, holidays observed, vacations, use of telephones, securing supplies, etc., may well be covered.

4. **Bonus and Suggestion Systems.** If a concern operates bonus and suggestion systems, they should be fully described under a separate heading.

5. Health and Fire Protection. Whatever plans of health protection are observed—the employment of a physician, arrangements for a first-aid corps, etc.—should be briefly described under the above caption. Any rules and regulations as to what to do in case of fire should also be given.

6. Educational and Social Sides of the Organization. Here may be described any classes which have been organized to further the educational training of the employees and also any clubs that may have been formed for their benefit.

A manual drawn up on these lines constitutes a practical working guide for the new employees, and at the same time is a work of reference to which the experienced employee can turn when in doubt as to policy.

Points to be Covered in Policy Book

Detailed instructions in regard to specific points to be covered in a policy book would be of slight value because of the difference in needs of individual cases. The following list of subject headings, however, taken from the manual of a manufacturing organization—filling 64 pages in all—will perhaps indicate some of the points which are often properly taken up, and a possible order of treatment.

1. Purpose of the manual.
2. History of the company.
3. The business and its policy.
4. Executive organization.
5. Production division.
6. Sales division.
7. Operating and administrative divisions.
8. Suggestions.
9. Mistakes.
10. Verbal instructions.
11. Monthly bulletin.

12. Bulletin board.
13. Office hours and overtime.
14. Absences and tardiness.
15. Holidays.
16. Vacations.
17. Resignations.
18. Dismissals.
19. Pay.
20. Drinking glasses and towels.
21. Neatness and care of equipment.
22. Neatness of dress.
23. Interdepartmental communications.
24. Prompt dispatch of paper and correspondence.
25. Unnecessary noises, conversations, and moving about.
26. Requisitioning of supplies.
27. Petty cash vouchers.
28. Home address and telephone numbers.
29. Illness.
30. Lost and found.
31. Visitors.
32. Telephone conversations.
33. Personal mail.
34. Discounts to employees.
35. Smoking.

Form of the Policy Book

In a small office with a clerical force of less than a hundred workers, the manual may consist of a number of manifolded sheets protected by a cover and bound together with tapes or metal fasteners.

In some cases no permanent form of manual quite meets conditions. Perhaps new instructions are being frequently issued, rules are being amended or canceled, the policy of

the management may vary from time to time, or perhaps reorganization or standardization work may be in progress. Under these circumstances it might be preferable to use a loose-leaf binder in which each employee files away the type-written sheets as received and removes those which are out-of-date. As a general rule, however, these manuals are printed in pamphlet form in sufficient quantities to last for a year or so.

Manual of Procedure

The manual of procedure, as its name infers, covers the actual work performed in the office. It is generally compiled in sections, a section for each department. As a rule a copy is kept by the department concerned and used as a book of reference. In some cases copies are given to employees in the more important positions. If the firm maintains a private library, a set of all the departmental manuals may be kept there.

In the training of new employees the importance of such a manual, covering as it does the best method of performing each operation, is obvious. It simplifies the process and cuts down the length of time necessary to teach the employee his new duties and is in this respect a source of real saving. Then again the firm is rendered more independent of its employees, because there are no "secrets" regarding the best method of performing a function. Each employee must follow the instructions in the book of procedure until a better method is found. When the new method has been incorporated in the manual, and only then, is the improved process to become effective.

A Process of Growth

A manual of this kind, requiring much patient analysis and close constructive thinking, is obviously a growth of

time. Previous chapters covering the analysis, control, and methods of performance of work, will give a general idea regarding the subject matter of the manual. If the analytical work has already been done and the organization is running smoothly, then the manual of procedure becomes a convenient and, in fact, a necessary method of keeping in a permanent form the results of the time and effort spent. If no survey of the office or other attempt to analyze the functioning of the organization has been made, then the compilation of an office manual, because of the analytical work necessary, will result in improved methods that will more than repay the cost of compilation. Experience has shown that written instructions often reveal glaring inconsistencies which oral instructions and actual operations do not necessarily indicate. Permanently recorded, written instructions have a definite constructive value for this reason alone, quite apart from any other.

The Beginning of a Manual

To illustrate the process in the more embryonic state, the following description of the problem confronting a bank and the solution found, will be instructive.

The problem here was to collect the statistics needed by the directors of the company for use in their board meetings. These statistics had to be gathered from 19 different departments, each of which had its own point of view. Their collection was merely incidental to the departmental work and the clerks who looked after the matter in the various departments worked with varying degrees of accuracy. The result was that some department was always behind time, and at no time was there absolute accuracy. The solution of the problem would involve finding some way of fixing responsibility and prescribing operations to be performed by each department. The plan of procedure was as follows:

1. Selection of items to be reported.
2. Fixing responsibility and authority as to data.
3. Establishing unit form on which such entries are to be made.
4. Arranging centralized point to which all data collected may be easily referred.
5. Including in a proposed departmental manual sources and methods of handling above data.
6. Charting interrelations of all department heads and responsibility for producing data.

Analysis of Work to be Done

Analysis of the work to be done revealed that there were 30 different items to consider. These were listed in the following order:

1. Number of errors adjusted weekly.
2. " " pass-books balanced.
3. " " accounts.
4. " " journal tickets daily.
5. " " accounts.
6. " " checks certified daily.
7. " " checks paid through the clearing house.
8. " " collection items daily.
9. " " clearing house checks redeemed daily.
10. " " cash items daily.
11. " " messages sent daily.
12. " " telegrams received.
13. " " items handled daily.
14. " " discounts made daily.
15. " " letters of credit issued daily.
16. " " checks received each Wednesday.
17. " " letters received daily.
18. " " checks received each Wednesday P.M.
19. Amount " currency counted daily.
20. " " currency received daily.
21. Number " express packages received daily.
22. " " small letters received nightly.
23. " " large letters received nightly.
24. " " credits made daily.
25. " " letters of advice daily.
26. " " registered mail received daily.

27. Number of notes received daily.
28. " " checks paid daily.
29. " " deposits received daily.
30. " " stock transfers daily.

Responsibility of Departments

After these various operations had been listed the responsibility of each department was analyzed, and the operation numbers, with the departments responsible in each case, were listed as follows:

Items	Department
1, 2	Auditors
3	Balance bookkeepers
4	General bookkeepers
5	Bank bookkeepers
6	Certification
7	Check desk
8, 9, 10	City collection
11, 12	Code
13	Country collection
14	Discount
15	Letter of credit
16, 17, 18	Mail teller
19, 20	Money cage
21, 22, 23	Night force
24, 25, 26, 27	Note tellers
28	Paying tellers
29	Receiving tellers
30	Transfer

Method of Doing the Work

The next step was to determine exactly how the work was to be done in each department. The actual procedure covering the operation to be performed was written out and certain individuals were picked out to perform the work. It became a part of the employees' duty cards.

Layout of the Manual

When the research work had progressed this far, an office manual began to take shape. At first this was designed to

cover merely the operations pertaining to the gathering of statistics. From time to time, however, other functions were embraced until finally all the operations performed in each department had been written up.

Each department was furnished a loose-leaf leather binder in which the typewritten instruction sheets were inserted.

The organization of the bank as a whole was charted and the departmental relations clearly indicated. Each department's responsibilities in producing data were shown. Each department was charted, properly blocked, and connected to show the function, authority, and responsibility of each employee making up the personnel of that department. This would include:

1. Head of department
2. Assistants
3. Clerks
4. Stenographers
5. Messengers
6. Miscellaneous

Following the organization chart came the instruction sheets covering the procedure of each department. The manual was illustrated throughout with specimens of the forms used, together with instructions.

A Manual in Outline

While the foregoing description of the methods of procedure in collecting data for the manual is vital to a correct understanding of the problem, it cannot disclose the nature of such a manual when written out. Accordingly, a complete set of instructions covering the work of a complaint department is given as an illustration of the scope, points of detail, organization of material, and style of composition.*

*Report National Association of Corporation Schools, 1916.

THE COMPLAINT ADJUSTER

Relation to customer and to the company.

I. FOREWORD

At least a paragraph should be devoted to a discussion of the importance of the work. For example:

INSTRUCTIONS FOR COMPLAINT ADJUSTERS

The pages that follow explain in detail exactly how every class of complaints is adjusted.

To do your work properly, it is necessary that you first understand all this detail.

In adjusting complaints, you should always bear in mind the policy of the house, which is:

To deal fairly—to please every customer.

Remember that so far as the customer is concerned, **you** are the "COMPANY," and you are to see that the adjustment is made correctly and fairly. If you do not, then the "COMPANY" has not lived up to its guarantee.

The policy of the "COMPANY" is really to please the customer. If any question arises which is confusing or which you do not understand, go to your department head for advice. In everything you do, carry out the "COMPANY" policy.

To deal fairly—to please every customer.

II. COMPLAINTS CLASSIFIED

Practically all complaints received by any company can be grouped under some or all of the following headings:

A—NON-DELIVERY OR SHORTAGE

The distinction between these depends more upon the records than anything else, as they are practically the same to the customer. Non-shipment is usually caused by incomplete stock, delay, or error in handling, so shipment is not made in time to reach the customer by the date expected, or is incomplete.

Sometimes a shipment may have been made, but the package is lost or delayed in transit; some of the contents may be lost or stolen. While such occurrences are beyond the control of the company, complaints of this kind are received, and must be adjusted.

B—UNSATISFACTORY SERVICE

The interpretation of the word "service" depends upon the company. For the sake of convenience, merchandise service is considered under a separate heading. Here it means the complaint caused by the way things are done. *Errors* are the principal cause of this group—errors of omission and of commission, including inaccurate

figuring, copying, or filing, careless penmanship or interpretation of the customer's instructions, failure to record transcriptions properly so that accounts balance—all cause their quota of complaints. A trivial error at the beginning may be the cause of continued and repeated mishandling right through the house. Other serious complaints are caused by *delay* in handling orders and mail, and in those places which come in personal contact with the customer, by *lack of interest and courtesy* in attending to the customer's desires.

C—UNSATISFACTORY MERCHANDISE

This refers entirely to the commodity sold, whether wearing apparel, dry-goods, automobiles, or electric current. When the quality, durability, style, or any of the countless details concerned in salable goods, fails and a complaint results, the merchandise is to blame. This is a "merchandise complaint"—whether the dress faded, or the light would not light. The commodity that does not come up to the expectations developed by the sales talk, spoken or written, is unsatisfactory merchandise. Cases of damaged or soiled goods are also included under this heading.

This classification may be used for subdividing the work of the adjusting clerks, and in this event each becomes a specialist in the adjustment of certain cases. It is essential, however, that all adjusters have an understanding of all the conditions, as these conditions frequently interlock, or occur in the same letter. Such cases would necessarily be rehandled or mishandled unless all clerks were properly trained.

III. SOURCES OF INFORMATION

The adjuster requires *general information* about the company's methods, as well as *specific instructions* covering the particular work he is to do.

A—SOURCES OF GENERAL INFORMATION

This covers the way things are done and the records and instructions included in these operations; the sources of this information should be specified:

1. From the manual or other written information supplied by the company.
2. From instructions of superiors and co-workers.
3. Instructions should cover the following points:
 - (a) Receiving and recording the order or contract; who does this, where, and the principal points involved in the work.
 - (b) Handling the records of the order:
 - (1) Filling the order—who does this, how, etc.:
 - From stock
 - By substitution
 - Made to order

- Held orders (more information necessary)
- Back orders (goods temporarily out)
- Cancellations (order cannot be filled)
- (2) Sales records—who makes them, how.
- (3) Bookkeeping or accounting records.
- (4) Policy regarding special conditions:
 - Returned goods
 - Balances
 - Alterations
 - Transportation charges, and other fees
 - Damaged or other claims
 - Doubtful and unjust claims—"policy adjustments"
- (c) What records are obtainable to show the conditions in the order:
 - (1) Price lists, catalogues, showing the merchandise carried by the company. The particular items involved in a transaction are obtained from the order, contract, or correspondence.
 - (2) Files, books, or other records made in the process of filling the order, as described above. Particular reference is necessary to those used in making adjustments. Regarding files, explanation of the following points is desirable:
 - Name*—"Shipping Records," "Correspondence," etc., showing nature of the records filed in that section.
 - Kind of file*—Card, sheet, folder, etc.
 - Filing system*—How these records are filed, alphabetically, geographically, numerically. Explain which is the filing index and why.
 - Location of the file*—Department (name and number). If file is visited in person, mention location in the department.
 - Why the file is kept*—Value of the records; if the same information is in two or more files, explain differences and why both are kept; which file is given preference in consultation, and why.

B—SOURCES OF SPECIFIC INFORMATION ABOUT ADJUSTING

This covers the particular detail of actual adjusting, and must be accurate, complete, and clear, as opposed to the general information, which only needs to give the adjuster an idea of the work described. The sources of this information should be similarly indicated:

1. From the manual or other written information supplied by the company.
2. From verbal instructions of superiors and co-workers.
3. From explanations by teachers, superiors, or co-workers.

Instruction should cover the following points:

IV. ADJUSTING

The adjuster who has all this preliminary information is ready to take up the actual detail of making adjustments.

A—SUPPLIES

1. List supplies required; explain keys, if used.
2. Obtaining supplies; use of requisition, if required.
3. Care of supplies; cabinets, or other arrangements for keeping supplies in use clean and neat; reserve supplies.
4. Use of supplies:
 - Use of the various forms; if serial numbers are used, explain importance, fill-ins; copying.
 - Fastenings; explain any special method of fastening.
 - Carbons; number required; use of carbon copies, clearness.
 - Folding statements, etc., for address in outlook envelopes.
5. Economy:
 - Not to be used for personal correspondence, cuffs, etc.
 - Spoiled or mutilated post-cards and stamps not to be destroyed; state to whom they should be given for redemption.

B—ROUTING OF WORK

How complaints are received:

Letters

Telegrams

Telephoned complaints

Complaints made in person

1. Explanation of routing and mail classification scheme used by the company. If the adjuster does his own classifying, detailed instructions must be given. The sequence in which the various classes of mail are routed to departments and individuals must also be explained and illustrated. Various schemes are:
 - (a) Marking the route on the letter.
 - (b) Attaching a slip on which the routing is indicated; where there is choice, the proper headings are circled.
 - (c) When the slip is gummed, it is a sticker, but used the same way.
2. Handling of papers before adjuster receives them. Explanation of symbols and records attached; acknowledgment; recording instructions.
3. Handling of adjustments after completion.
 - (a) What are to be handled by other departments and why.
 - (b) What are to be destroyed.

C—DUTIES

1. Records of files of information kept by the adjuster for use in adjusting; nature of this work, how and when done.
2. Adjusting; the detailed instructions regarding the various adjustments are more fully explained later.
3. Order of papers in a finished adjustment; disposing of the finished adjustment; when the order of pinning papers is a matter of routine, the reason for the position of each should be explained.
4. Records of adjustments.

If permanent records of adjustments are kept, detailed explanations of their form and use should be given. For example:

"Record on the shipment sheet (sample attached), a summary of the facts given by the customer. Opposite, under 'Answer,' summarize the facts to be covered by the correspondent, or write the key of the form letter sent, and sign."

5. Records of causes of adjustments—noting of errors, and charging same.

The forms used for these purposes must be attached and explained.

6. Daily report—how filled in; explanation of efficiency records, if kept.

D—ROUTINE

1. Ascertain the facts of the complaint from the letter or the customer himself. It is necessary to know what is wrong before adjustment can be made.
2. Obtain the facts of the case from the company's records by personal visit.
Explain what to look for, meaning the information on the sheet or card.
State whether the record may be removed or the necessary information copied without removing the record.

How information is obtained other than by personal visit. In this explanation would be the illustration of the various information forms used, how they are filled in, time allowed for each department to answer, how the information slips are delivered to the departments and returned to the clerk making the requests. In cases where such information is obtained by telephone, include specific instructions regarding calling the department and explaining the information desired without repetition. This should also include the meaning of all code terms used in the house.

Cases where the complaint is caused by error, evidence of the error is usually sufficient for immediate adjustment. Such cases as badly written, indistinct or omitted entries; errors and omissions in copying and in filling orders, errors in figuring, causing wrong amounts to be given in change, refunded or credited.

3. Using the information—how to decide the course to pursue; how the records affect the adjustment; recognizing the exceptional case.

V. FORMS OF ADJUSTMENT

A—EXPLANATION

Explanation when used without money or merchandise being involved, should close the transaction except in unusual cases or where the circumstances are beyond the control of the company.

1. *Verbal* explanations are the simplest. A clear, courteous statement of the conditions showing the customer that the company's policy is to be helpful, should dispose of these where no money or merchandise adjustment is necessary.
2. *Written* explanations may be either form or dictated letter, or post-card, and should cover three points: Regret for the cause of the complaint, statement of the facts as in verbal explanations, and a promise to prevent repetition of the unsatisfactory occurrence, appreciation of patronage, etc.
3. Whether or not records of these adjustments are kept is a matter of policy for the company to decide, but definite detail of how these are handled is essential; for example: Records show shipment. Delivery chart compared with date of complaint indicates:
 - (a) Complaint was written *before* delivery could be made: address S/M (shipment made) post-card, filling in date of shipment.
 - (b) Complaint was written *after* delivery should have been made: address TR (tracer) post-card, filling in date of shipment.

The above are form adjustments explaining when shipment was made.

B—ADJUSTMENTS

Hereafter, the term "adjustments" will be used to refer to cases where the customer receives merchandise or money.

In these cases the company gives the customer something more tangible than explanations to insure proper satisfaction. In deciding which is the correct disposition, the specific instructions on the preceding pages must be explicit.

C—REPAIRS OR ALTERATIONS

This covers most cases of merchandise which has given unsatisfactory service. In some cases the merchandise is returned to the company, or an employee must visit the home of the customer to make the required changes. In either case, definite memorandum of the following points should be attached:

1. Instructions to clerk making repairs or alterations. If different forms are used for different departments or classes of goods, explain use of each; samples properly filled in should be attached.
2. Authorization for shipment of such adjustment made in the house; forms used; differences from regular order. If charges are necessary, detail for entering and recording should be given.
3. Specific routing instructions for finished adjustment.
4. Accounting and adjusting records.
5. Nature of reply, if required.

D—EXCHANGES

This is the term used when the customer returns goods for which new merchandise is given. The operation is the same, whether returned by mail, by "call" of company's representative, or in person.

A record of the merchandise returned is made, for accounting as well as for adjusting purposes. This record is the evidence of credit against which the value of the new purchase is drawn.

Where the return is made in person, the customer may be given his selection at once—a credit slip or voucher for the amount; most places use a slip, giving the customer the privilege of using it as cash, when purchasing, or of obtaining money for it from the cashier; other concerns credit the account as though a payment were made, entering the new selection as a new sale.

The following points should be covered:

1. Receiving the return, records of same, and use of each.
2. Evidence of O K's required by adjuster.
3. Transportation charges—when allowed; amount; account.
4. Instructions for authorizing new shipment.
5. Specific routing instructions for finished adjustments.
6. Accounting and adjusting records.
7. Nature of reply, if any.

E—DUPLICATES

Merchandise allowed the customer in place of that newly delivered.

When for some reason or other the merchandise is not delivered at all and a reasonable time for delivery has been allowed, it is necessary to duplicate an order sent by the customer. Sometimes such duplications are exactly the same as the original order; or in the meantime a new selection may be desired instead of the first. In such cases when the shipment is by express, freight, or insured parcel post, the company can recover by filing claim.

The following points should be included:

1. Evidence or O K's required by adjuster.
2. Instructions for authorizing new shipment.

3. Specific routing instructions for finished adjustments.
4. Accounting and adjusting records.
5. Nature of reply, if any.

F—CREDITS

Amounts allowed customers for various reasons. The method of handling these cases depends upon the company. When the customer has a "charge account" the entire transaction is simply a matter of bookkeeping.

Cash transactions usually involve a credit slip or voucher of some kind as evidence that the customer is entitled to the amount.

When returned to the issuing company, such credit vouchers act as cash. In certain cases, such as allowances, etc., the credited amount may be used as cash in the purchase of merchandise, but not for refund.

Explanation of the following points is necessary:

1. Evidence or O K's on which allowance is based.
2. Instructions for authorizing credit.
3. Making the credit voucher for customer.
4. Specific routing instructions for finished adjustments.
5. Accounting and adjusting records.
6. Nature of reply, if required.

G—REFUNDS

These are amounts returned to customers for various reasons when the customer asks that his money be returned. Whether or not the amount is given immediately depends upon the circumstances. When there is evidence that the merchandise has been returned or never delivered, the customer's request should be immediately complied with.

If the investigation shows that either the customer or the company has not received the merchandise, or that the request is unjustifiable, the refusal must be very carefully explained in order to prevent still further dissatisfaction. At the same time, it is good business to try to fill such orders whenever possible, and save the refund.

Cover the following details:

1. Form of refund—check, cash, money order.
2. Evidence or O K's on which refund is made.
3. Instructions for authorizing refund.
4. Making the refund; receipt for same.
5. Specific routing instructions for finished adjustments.
6. Accounting and adjusting records.
7. Nature of reply, if required.
8. Getting refund back, and keeping customer's friendship.

H—POLICY ADJUSTMENTS

Allowances are a form of adjustment which definitely comes under the class of "policy adjustments," and are for the sake of

retaining the customer's good-will, even when an element of unreasonableness is present. Such are made where the customer has been put to unusual expense because of some failure in the service of the merchandise. The amount is credited or refunded according to the policy of the house and the customer's request.

Also cases may occur where an essential record is missing, but for the sake of the customer's convenience, adjustment is made. Usually such "No Record" adjustments are followed up. One company uses an "Investigation Card."

Explanations should be along the same lines as outlined above.

Writing the Manual

So far as concerns the instruction side of the manual, it is important to bear in mind that the instructions and rules issued must be perfectly plain to the lowest order of intelligence among the employees. Therefore, they should be carefully written, keeping constantly in mind that explanations which may be perfectly clear to the trained mind will be altogether too general to suit the immature or untutored person. Unless the significant points stand out plainly it may never accomplish what it sets out to do. There must be no two ways of interpreting the meaning of the rules formulated. Then again, good reasons should be given for any position taken, because many of the regulations will otherwise seem arbitrary to the ordinary employee.

Frequent Revision Desirable

When the manual is first put out, it should be understood that the instructions contained therein are more or less experimental, to be changed as experience proves necessary. Better methods of procedure are almost certain to suggest themselves as a result of the analysis made and the attempt to formulate the instructions. The very fact that the management is visibly interested in the procedure by which employees perform their various operations, will undoubtedly give rise to suggestions for improvement. When the better method is found adjustment should be made in the manual.

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